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EDITED BY

GEORGE H. HUBBARD, M. D.

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[For the N. H. Journal of Medicine.]

CASE OF POISONING BY OPIUM.

NEW MODE OF INDUCING VOMITING.

Mr. Editor :—Mrs. S., æt. 30, previously in good health, while in a passion, induced by some domestic feud, procured and swallowed from ʒv to ʒviij· of tinct. opii. In a short time she became quite stupid. The poison had been swallowed forty-five minutes, when I arrived, and she had taken large draughts of tepid water, and mustard..

She was quite stupid; cerebral vessels distended; face flushed, and could walk only with the assistance of two persons. Wishes to be left alone, that she may go to sleep. While held erect, her head falls to one side, and she breathes with some difficulty.

Ordered an emetic of pul. ipecac and pul. sinapis, aa. ʒij. in tepid water, to be followed by several tumblers of water, the head to be showered with cold water. No vomiting occurred in thirty minutes. Repeated the emetic. Introduced a feather into the œsophagus. Waited fifteen minutes; no relief; symptoms more grave. Ordered two tumbles of diluted vinegar, to be immediately followed by ʒij. of carb. potassa, in water. A powerful effervescence took place, which instantly produced most copious vomiting.

This is a new remedy with me in such cases, and one attended with most desirable results. It may answer instead of the stomach pump in many cases. If you think the case of sufficient interest, it is at your service for the Journal. JAMES M. NYE.

Lynn, Mass., Nov. 17, 1853.

[We recollect reading some years since, a case similar to the above; if our memory serves us right, in that case the patient, (from insensibility or obsti-

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nacy,) could not or would not swallow; the solution of alkali and the vinegar were injected into the stomach through a tube; they were used in large quantities, and got up quite an impromptu "spouting fountain." In that case as in this, the result was satisfactory.—Ed.]

[For the N. H. Journal of Medicine.]

MEDICAL EXAMINATION AT DARTMOUTH COLLEGE.

Mr. Editor :—The examination of candidates for the degree of M. D., at Dartmouth College, was held on the 7th and 8th November. Dr. J. E. Tyler, of the N. H. Insane Asylum, was present as a delegate from the N. H. State Medical Society,—the other delegate, Dr. A. F. Carr, of Goffstown, being prevented from attending by sickness in his own family.

The following gentlemen were admitted to the degree of Doctor in Medicine—their residences and the subjects of their theses also being as follows: James P. Barnett, New-York City—Nature of Absorption; Charles C. Beckley, Windsor, Vt.,—Miasmatic Fever; Andrew J. H. Buzzell, Dover—Delirium Tremens; Nathan Call, Boscawen—Ætiology; Alphonzo G. French, Warren—Remittent Fever; William M. French, Paper-Mill Village—Acute Pleurisy; Wm. A. Griffin, Roxbury, Mass.,—Acute Pneumonia; Alex. P. Hanna, Grand Isle, Vt. — Pulmonary Consumption; Andrew J. Huntoon, Langdon—Acute Pneumonia; Yorick G. Hurd, Peterborough—Acute Peritonitis.

On the forenoon of the 9th, a very interesting address to the graduating class was delivered by Dr. Tyler, in the Chemical Hall of the Medical College; after which the degrees were conferred by N. Lord, D. D., President of the College. The class has been somewhat larger during the past than the preceding terms; and a more gentlemanly and studious class of young men has never been assembled in the Medical Institution of our State. E. R. P.

THE DUTY OF PHYSICIANS TO SUSTAIN OUR PERIODICAL LITERATURE.

BY FREEMAN KNOWLES, M. D.

There are perhaps few subjects of more importance to the profession at large, than that of our periodical medical literature; nor is there one in which the great mass of the profession are so remiss in furnishing the "material aid" for the support of a good medical journal, and facts and discoveries on which it must subsist.

It has become proverbially true, that many of our best and most experienced physicians never furnish a line or a word of encouragement to the conductors of our medical journals; while here in the West, is it too much to say that not over half even subscribe for and take any medical periodical whatever?

Brethren, these things should not be so. If you wish to hold an honorable rank in your profession, and contribute your full share to make that profession to which you are devoting your lives, what it should be—an honor to yourselves and a blessing to mankind—support your periodical press, support it by words of lofty cheer, support it by subscribing for home as well as foreign journals, and, lastly, though not least, support it by your contribution of facts and experiments, and you will soon find that such labor is twice blessed—that it blesses both giver and receiver.

Young men who have closed their period of pupilage with their preceptor, finished their last course of lectures at their alma mater, received their diploma with the broad seal of the institution, are too apt to think they have closed their medical education, and that thenceforward they have nothing to do but wait quietly for professional distinction and emolument. To all such let me remark, you have mistaken your vocation; professional drones have been the canker and blight on all true professional distinction; and, though in such a course a man may obtain his bread, he will never rise above a degrading mediocrity in his cause, and will be rather a curse than a blessing to the people among whom he may be situated. Such a course, let me remark, is not in accordance with duty to yourselves, your fellow-men, your country and your God; for, be it remembered, that progress is the great law of our being; and when you have left the office of your preceptor and the halls of your alma mater, resolve to be a student of nature,—the wide arcana is open before you, and if you are true to her and yourself, you may enter into her temple, and feast upon her transcendant mysteries.

What, then, let me ask, has produced the distinction of the Bells, the Hunters, the Beaches and the Gregorys, of England; the Dupuytrens, Cuviers and Bichats, of France, and a host of other distinguished names all over the continent. And again, what has enabled so many of our own distinguished sons to scale the rugged paths of eminence, and with their own hand to write immortality upon the Temple of Fame. It has been industry, energy, perseverance, and an indomitable will and determination to succeed. All should remember that Minerva is a jealous goddess, and puts a high price upon the honors of her court, and that she will not permit her pupils to waste their hours in soft slumbers and yet obtain the rewards of merit,—it is only on the heights of Parnassus that she distributes her laurels. We must therefore climb, and cling to its rocks and precipices, its boulders and evergreens, till we gain the summit, before we can wear the crown.

How important, then, to professional usefulness and distinction, are habits of industry and untiring perseverance in the cultivation of medical science.

All around us the great fields of vegetable, mineral and animal creation are inviting scrutiny and investigation. There is labor enough for each and enough for all, and when we enter this field we should enter it as free and independent observers, with no theories to bolster, no prejudices to gratify, and no opinions to sustain, but ever remember that *skepticism in medicine is no crime.* We shall then, in all our investigations, be guided by an honest desire after truth. This truth will become our motto, and in the same ratio that we seek after truth with energy, industry and perseverance, shall we find it.

We wish to call the attention of the profession to another important consideration, on the success of which much of our character and medical literature depends, and that is the support of our HOME MEDICAL SCHOOLS.

We are fully aware that much may be said in favor of our excellent Eastern Medical Institutions. It is also true that very much may be said in favor for a Western physician of our own Medical Schools.

The Professors in nearly all our young Western Schools are men who were educated in the East, have had all the advantages that such schools confer, besides the long years they have spent among and combatting with the very diseases the Western student expects to spend his life; and unless *our* Professors are very "degenerete sons of noble sires," *ceteris paribus*, they are more competent to teach Western students than most of those who so honorably fill the chairs in the schools in the Eastern States.

Then, what we would say to the Western student, is, *exhaust the sources of learning in your home Medical Schools*, and then if you have time and money to spare, visit, not only our Eastern, but the schools of England and continental Europe, where you may store your minds with all the rich treasures of science and art which the oldest and best can bestow. When returning, you may bless your native land by devoting the maturity of a widely cultivated mind to the best interests of suffering humanity.

But if you have neither time nor means for such an expenditure, your time, as a general rule, will be better spent in exhausting the medical sources at home, studying the diseases incidental to your climate and locality, than by seeking that at foreign schools, which, in many instances, is rather ornamental than useful, to the exclusion of that which will render you a useful and successful physician.

There is another point to which I wish to call the attention of our Western physicians; and that is, write for your home journals; communicate facts, every thing new or interesting, either as it may relate to articles of the materia medica, discoveries in the modus operandi of medicines in their application to given cases of pathology. Scarcely an epidemic occurs, when the intelligent scrutiny of the practitioner will not discover some new feature or peculiarity not hitherto observed. If these facts were all faithfully transmitted to the medical journal of your State or section, what a mass of clinical information would be gathered, and in turn scattered broad-cast to all parts of the country, furnishing important data for the evolution of great principles which are to serve as beacon lights to guide the student of nature and the practicing physician in times of uncertainty and doubt, peering up amid the gloom of professional and scientific investigation, like a light-house to the tempest-tossed mariner, enabling him to guide his laboring bark in safety to the calm and peaceful haven of rest. So such facts and principles aid the physically and mentally over-tasked physician in seasons of doubt and peril, when some important case is vibrating between life and death. If the patient be the father of a large and helpless family, entirely dependant upon his exertions for support, the pleadings of that heart-stricken and suffering family, in looks more eloquent than words, "oh, save my husband, save my father," ring in his ears, and vibrate in his very soul. What, then, would he give for some principle, some fact, that should enable him to rebuke the disease, calm the throbbing heart, and bid health and vigor once more course through his frame and mantle his cheek — granting him the power, under Providence, to give back the husband and father to that weeping, trembling, rejoicing family.

Then, friends, treasure up your experience, be willing to contribute your share to add to the motive power that shall move on the car of progress in professional and scientific improvement ; so shall you become benefactors of your race, add to your own professional renown, and have the satisfaction of feeling, at the close of life, that you have done your duty.—*Iowa Medical Journal.*

ON THE APPLICATION OF GUTTA PERCHA IN THE TREATMENT OF DISEASES OF THE SKIN.

BY ROBERT I. GRAVES, M. D., F. R. S.

Dr. Graves directs the attention of practitioners, in the treatment of certain forms of cutaneous disorder, to the necessity of protecting the abraded and tender surface of the skin, the *cutis vera,* from the contact and action of the air and other hurtful agents. The effect of blood coagulating over a cut or abraded surface, is known to be beneficial, and not less serviceable are those secretions which are furnished by surfaces abraded and in a state of inflammation. The premature and forcible removal of all these discharges, which are to be regarded as natural coverings, is always injurious, and tends to continue inflammation and irritation, and consequently to defer healing, and protract the disease.

Dr. Graves thinks that artificial substitutes for these secreted coverings.

or artificial coverings over them, may be useful in effecting the healing of extensively abraded surfaces in cutaneous disorders. Of this nature are solutions of collodion, which have been in occasional use for some time; and more recently solutions of gutta percha in chloroform, have been employed with similar beneficial results.

It is well known that there are certain obstinate forms of cutaneous disorder, in which, whether from the nature of the disorder, or the extent of the skin abraded, denuded, and irritated, it is often difficult to effect either cure or alleviation. Such are some of the forms of psoriasis, eczema, impetigo, and leprosy. In treating affections of this kind, a covering of gutta percha seemed to Dr. Graves well calculated to protect the tender surface, and thereby to promote the healing process. After various trials with this agent, the results have been such that Dr. Graves conceives that they ought to be well known. The therapeutic application of gutta percha is mentioned by Dr. Neligan in his recent work. But it may be useful here to give some notice of the method, from the account by Dr. Graves himself.

When the saturated solution of gutta percha in chloroform is spread by means of a camel's hair pencil over a portion of the skin, the solvent fluid rapidly evaporates, leaving a delicate and extremely thin pellicle of gutta percha firmly adhering to the part. The peculiar toughness of gutta percha prevents this pellicle from being brittle, and therefore it is much less liable than collodion to crack and fall off in small scales. On the forehead or face, where it is not affected by friction of the clothes, it remains firmly attached for five or six days, or even longer; but on other portions of the surface it is often rubbed off much sooner. Over dry eruptions of the skin it lasts longer than over those which are moist, and over smooth and firm spots, of course, longer than over those covered with rough morbid scales or loosely adhering crusts. Before the application of this solution therefore, the practitioner will do well to render the portions of the cutaneous disease to which he intends to apply it, as free as possible from crusts or scales, by means of poultices, alkaline lotions, &c. When the precaution is taken, he will find that the artificial cuticle which he has applied with his brush, will, in certain cases, act most sensibly on the subjacent disease, diminishing inflammation and its consequences, and powerfully contributing to the restoration of the healthy structure of the skin.

Whether it acts by the equable pressure which the film of gutta percha, suddenly coagulated from the fluid state, must exert on the surface to which it becomes so firmly adherent, or whether its efficacy be rather owing to other causes, it is beside the object of Dr. Graves in writing this notice to discuss. He remarks, however, that the curative properties of such an artificial covering are not confined to the skin; for, in the "Gazette Medicale de Paris," (April 10, 1852,) is an account of the successful application, by M. Dechange, of collodion in orchitis; and the *modus operandi* is said by him to consist in its compressing the tissues, and protecting the parts from the action of the air, which he thinks is a powerful element of phlegmasia. Without giving an unqualified assent to this explanation, Dr. Graves has no hesitation in announcing his firm conviction, that, in diseases of the skin, this solution furnishes us with a new and active remedy, exerting effects quite different from those produced by any topical application hitherto in use.

The transparency of this artificial membrane enables the surgeon to watch the progress of the subjacent diseased skin, and its colorless nature prevents it from disfiguring the face when the eruption occupies that part. Its perfect cleanliness, too, is no small advantage, and affords a very agreeable contrast when compared with the usual ointments, &c.

The observations of Dr. Graves confirm what reasoning on this subject would lead us to expect, that this application is more suited for dry, scaly, tubercular, and chronic diseases of the skin than for acute affections attended with much oozing of fluid and comparatively active inflammation.

Still, its good effects are by no means limited to chronic diseases of the skin, or those of a scaly, dry nature; for, as will hereafter appear, Dr. Graves has seen it decidedly useful in the spreading form of impetigo. His experience of this remedy makes him anxious to witness its application in the first stages of erysipelas, as analogy leads him to hope for good results in such cases.

Of course the patient must aid the efforts of the physician, and must, as far as possible, abstain from every thing which tends to rub off or injure the artificial cuticle; for its virtue ceases when its continuity is broken and the external air finds admission to every part of the diseased surface.

Early in the month of November, 1851, Dr. Graves was called to visit Mrs. C., from ———. She was about fifty years old, full and plethoric; the mother of a large family, and, until the disease of which she then complained, commenced, generally healthy. About two years before, she observed small spots of impetigo on her limbs and body, which succeeded each other, some healing while fresh ones appeared. During summer, she was nearly free from them, but last autumn they returned with greater virulence than ever, and have since increased both in size and numbers, some being larger than the hand, and attended with constant oozing of fluid, which imperfectly coagulates, forming loose and thin crusts. The itching at night was intolerable, and nearly deprived her altogether of sleep. Dr. Graves employed the usual general and topital treatment for a fortnight without alleviation of her sufferings, when he thought of trying the saturated solution of gutta percha in chloroform, and had it carefully applied by Mr. Nicholls, of Dawson street, at first by way of trial, to one of the smaller spots, and on the following days to each of the larger patches of eruption in succession. The relief obtained was such that it appeared almost incredible, both to the patient and her family. Her cure was accomplished in less than three weeks; for, dreading the sudden stopping of so great a discharge and so much cutaneous irritation, he proceeded cautiously, and towards the end of the cure, when she returned home, he directed an issue to be inserted in her arm, as a measure of precaution. She has continued well up to the present time, (11th April, 1852.)

In this patient the attendants were at first obliged to reäpply the gutta percha every second day, as it was rapidly detached and broken up into large flakes by the discharge from the subjacent surface. Its healing influence, however, speedily diminished the diseased secretion, and then the artificial cuticle remained longer adherent, and it was not necessary so often to use the scissors for the purpose of cutting off the loose portions of gutta percha membrane previously to applying a fresh layer. The camel's hair brush should be plunged, the moment it has been used, into hot water, to prevent it from being consolidated by the coagulated gutta percha.

This case caused a great sensation among the patient's friends and relatives, and many were the inquiries made relative to the method of cure employed. Dr. Graves confesses that his own astonishment at the result was not less than theirs.

Since that time Dr. Graves has repeatedly used this application in *acne of the face*, in which disease each of the pimples should be covered with the solution, and the patient enjoined not to rub off the pellicle by washing, &c.

In some, this treatment alone causes a material and rapid diminution of this tormenting eruption, and by perseverance in this plan there is every appearance in two of his patients that the tendency to throw out the pimples is gradually ceasing.

Finally, in several cases of psoriasis, Dr. Graves applied this solution with great benefit. In this disease much care must be taken to prevent the application being rubbed off by the clothes, and no woolen stockings or rough garment of any sort should be allowed next the skin. I had the satisfaction of curing in a fortnight a chronic psoriasis of the back of the hands and arms in a lady who had been under homœopathic treatment for six months without deriving the least advantage from the infinitesimal doses prescribed by the practitioner.

Since the preceding observations were written, Dr. Graves received the following note from Mr. Moore. The additional information concerning the effects produced by the application of collodion strongly verifies the observations respecting the local antiphlogistic action of a gutta percha pellicle:

"M. La Tour has for some time advocated the doctrine that external inflammation may be speedily subdued by withdrawing the affected surface from the influence of the air. This he effects simply by a layer of collodion, which, he says, rapidly assuages the inflammation of gout and articular rheumatism. At the meeting of the Academy of Medicine, on the 8th of February, M. La Tour related a case of peritonitis, in which the symptoms were dissipated within twenty-four hours, by the application of a layer of collodion to the whole surface of the abdomen."

Postscript, June 7th, 1852. My anticipation respecting the utility of an artificial cuticle applied over the parts affected by commencing erysipelas, has, I find, been verified, as appears from the following paragraph taken from Dr. Neligan's able Treatise on Diseases of the Skin:

"Acting as an impermeable varnish, and probably producing some effect, also, by the compression it causes, collodion has been successfully employed by Spengler and Rapp, as a local application in erysipelas. The parts are thickly coated with it by means of a camel's hair pencil, and it is renewed as ofted as may be required in consequence of its cracking and peeling off when dry."

When Dr. Stokes heard of the success of Dr. Graves in other cases, he resolved to try the gutta percha solution in small pox, and the result of two trials is most encouraging, and leads to the hope that at length a means of preventing the formation of disfiguring scars on the face in that disease has been discovered. Dr. Stokes has allowed Dr. Graves to publish the following case treated by him at the Meath Hospital, and noted by this clinical clerk, Mr. Robert P. White:

Catharine Sherlock, aged twelve, was admitted 13th May, (seventh day of eruption.) Her illness commenced by headache, pain in her loins, and rigors, but without sickness of the stomach; she was never vaccinated. On admission, she had a good deal of fever of a typhoid type; the eruption had come out well, was confluent, and had completely covered her face; she complained very much of pain and itching of her face and head, which kept her from sleeping. The solution of gutta percha was applied, and apparently gave her much relief, for she was easier afterwards, and ceased rubbing and tearing her face in the manner in which she had been doing before. Wine was also freely given.

May 22. All trace of the disease has nearly gone, the crusts coming off in large pieces, and the remaining marks of the disease being very trifling when compared with the violence of the attack.

The same effect of the solution in keeping the face moist was also observed in this case.

In communicating these cases, Dr. Stokes observed, as worthy of notice, and probably connected with the beneficial result produced, that the most remarkable effect of the gutta percha was to keep the face constantly moist, and to prevent the formation of hard and irritating crusts. He also mentioned a singular illustration of the effects of total exclusion of air from the cutaneous surface as a preventive of the eruption in small pox. It was that of a man who, while in the Meath Hospital for a scrofulous enlargement of the knee joint, was attacked with this disease; the knee had been previously tightly strapped with adhesive plaster, and on the disappearance of the eruption, it was seen, on removing the strapping, that not a single pustule had been developed on the parts which were thus covered.

It is scarcely necessary to add, that however useful solution of gutta percha in chloroform, or any other topical applications, may prove, it would be, nevertheless, absurd to expect from them a radical cure of those chronic cutaneous affections which arise from constitutional causes, whether strumous, syphilitic, or cancroid. As well might we look for the cure of scarlet fever, small pox, or measles, by means of remedies applied to the skin solely with the view of relieving the eruption. Still, in every chronic disease, it is manifestly desirable to diminish, by topical means, the annoyance or disfigurement arising from the cutaneous affection. This relief cannot but be serviceable if it did nothing else than afford time for the due and gradual employment of a well directed constitutional treatment. Dr. Graves saw this lately well exemplified in the case of a young lady who had been under the care of an eminent London surgeon for many months, and from whose medicines she had derived no relief. She was the subject of a most disfiguring eruption, agreeing in character with the *lupus supiginosus* of late writers; it occupied sparsely the nostrils and cheeks, but on the forehead it formed an extensive group of sores. Some spots it left hypertrophied after healing, but in general its course was marked by white depressed seams. It had been the seat of constant irritation, which the patient could not avoid increasing by scratching during sleep, and consequently the surface of the face usually exhibited a number of bloody points, adding to its disagreeable appearance. The entire eruption healed after a six weeks' application of the gutta percha, and she is now (what she has not been for two years) free from any cutaneous irritation. Time alone can determine whether relief will be permanent; but there can be no doubt of the great value of the advantage already gained.

Dr. Graves observes, that, in psoriasis and other chronic cutaneous complaints unattended with any constitutional derangement, it is of the greatest consequence to check the growth of each new spot. This the gutta percha does most effectually in psoriasis, and when applied daily to any recent points of irritation, it smothers, as it were, each nascent centre of future blotches.—*Dublin Quart. Jour.—Med. Exam.*

MEDICAL PROPERTIES OF OX GALL.—*Read before the Montgomery County Medical Society.*—The broad and catholic grounds which we, as physicians, occupy, stimulates us to push our researches in every direction, in order to extend our area of available medical knowledge. In no way can our efforts be spent to better advantage, than that of trying to enlarge our list of efficient remedies. We are bound to use all means, whether moral or physical, which the indications of science or the test of experience point out as the most successful in the removal of disease. Of the physical means, we, as regular physicians, have the privilege of selecting any thing which the material world affords. We may use a substance of any form, whether aeriform, fluid, or solid, or from whatever kingdom of nature it may be derived, whether animal, vegetable, or mineral.

The article that we have selected, and concerning which we propose to make a few suggestions, is taken from the animal kingdom, and belongs undoubtedly to that class of substances termed *secretion*. Ox bile, which has been brought very prominently before the profession, by Dr. Charles Clay, of Manchester, and other eminent British physicians, some few years since, has not been, as we think, so fully tested in America, with regard to its medicinal properties, as its merits deserve. It was brought into use, in the first place, from a suggestion that it might act as a substitute for the human bile, in the case of patients who seem to suffer from a deficiency, or perverted condition of that important secretion. In a country like ours, where perhaps three-fourths of all the disease with which we have to contend, is derived either directly or indirectly from a morbid condition of the liver, it would be well to pay the most strict attention to every remedial agent which may in the least promise to be serviceable in these cases. We do not expect that this article would meet successfully many of the symptoms growing out of the *retention of the bilious matter in the circulation*; but that it will remove that distressing condition of things caused by its *absence from the alimentary canal*, will scarcely admit of a doubt. In order to accomplish the first named object, it would necessarily have to eliminate the bilious matter from the blood, or restore the healthy action of the hepatic system. This last, however, might be done by its acting as a healthy stimulus upon the mucous membrane of the duodenum, thus (according to a well known principle in medicine) indirectly exciting the liver through the medium of its excretory duct. For this reason we are of opinion that inspissated ox bile could be used in jaundice and other like bilious affections with benefit.

Much might be said concerning the office of the secretion of the liver in the system of man, but the destined limits of this paper will not permit. Suffice it to say that its absence from the alimentary canal is invariably connected with symptoms which render life a burden. From the character of these symptoms, if from no other circumstances, we are naturally led to infer that the bile, in the animal economy, acts more particularly as an antacid and solvent in the stomach and bowels. The most common effects of a deficiency in quantity or quality of the bilious secretion are dyspepsia, acidity of the stomach, and obstinate constipation. It seems quite evident that these conditions are owing more to the absence of a sufficient quantity of good bile in the alimentary canal, than to its retention in the circulation; and for this reason we infer that this peculiar substance is a *secretion*, intended for useful purposes, and not an *excretion*, merely, as is contended by some.

We then propose to treat those affections arising from deficiency either in quality or quantity of the bilious secretion, by administering that which will prove, as we think it will in many instances, a substitute for it. If we may believe the testimony of several distinguished medical philosophers and practitioners who have used the ox bile in dyspepsia, and in its almost infinite variety of attendants, we will be fully convinced of its great utility. It generally corrects the acidity of the stomach and consequent head-ache which so often harass dyspeptic persons. Its alkaline properties seem to counteract the acid, and thus remove all the symptoms depending upon it. Cases are mentioned, upon the highest authority, in which the patient, after resorting to every article in the list of cathartics, in order to remove the constipated habit so frequently attending dyspepsia, have received permanent relief from the use of the inspissated ox gall. It has been used in cases in which the blue pill was inadequate to the purpose of producing any but the most transient effect, and in which all purgatives would leave the bowels in the same if not a worse condition than that in which they found them. The patients were compelled to linger on for three or four years, being almost daily under the painful necessity of taking cathartics, which would produce much griping and general uneasiness after taking them. Under these perplexing circumstances, the article to which we have called attention has been administered in the form of a pill with the happiest effect. One of these pills, (5 grs.,) has been given every three hours, and at these rates they scarcely ever fail to produce in less than twenty-four hours, full stools of natural consistence, and that, too, without any pain whatever attending their operation. After taking one of these pills twice or thrice per day, for five or six days, the acidity almost always leaves the stomach, also the head-ache subsides, and the bowels resume their natural and healthy condition.

The first instance in which I have used the inspissated ox bile, was in the case of Mr. R———, aged 25 years, an intelligent young gentleman of my acqaintance, who had been laboring under dyspepsia attended with slight hypochondria and the most obstinate constipation. He was of a delicate nervous temperament, and much given to sedentary habits. He was very much troubled with pains in his stomach and bowels, accompanied with dizziness in the head. The bowels would remain without a motion for a whole week unless a purgative was taken, in which instance an unusually large dose was required, and the pain attending its operation was represented as being dreadful. The stool was hard and of a light or brownish color. I might mention, also, that there was a sense of weight in the right hypochondriac region, sometimes amounting to downright pain. He remained in this condition for several years, when he was compelled to give up his avocation, (school teaching,) and turn his whole attention to the malady which was preying upon his system. All the cathartics were tried, that seemed to promise any good in removing the costiveness, which was the most troublesome symptom in the case. He would use one article, (for instance, Rhubarb,) until the system lost its susceptibility of being acted upon by it, and then he would resort to another with the same result. Thus he continued up to the summer of 1849, when I commenced treating him with the inspissated ox bile. On the day that I gave him the first dose, he had no motion of the bowels for four days. In the afternoon of that day he took two (10 grs.) pills, and repeated in four hours. The last dose was shortly afterwards followed by a full, soft and *painless* stool, to the great joy and satisfaction of the patient. He continued to take a pill, night and morning, until the most complete regularity of the bowels was established. The pain of the stomach and bowels entirely subsided, and his general health became much improved. He is almost of opinion that the *Fel Bovinum* is a specific, and prepares it himself, to use as occasion may require. This is only one of the many instances of the kind which could be mentioned, in which I have used this article with the most satisfactory results.

I shall mention another case which is of a somewhat different class of patients, who have been signally benefitted by the remedy under consideration. Mrs. ———, aged about 22 years, light complexion and medium size. Was a resident, up to the summer of last year, of the State of Mississippi. She is slightly hysterical, and has been for years affected with costiveness to such an extent as to be under the necessity of taking physic every few days. Large doses were required, which after a painful operation, left the bowels in their usual condition. She was somewhat chlorotic, and frequently suffered from what she called "fainting spells," which were very unpleasant indeed. After I had administered in this (as in the first mentioned) case, ordinary cathartics with but temporary effect, I resorted to the inspissated ox bile. I evaporated the gall to the consistence of thick tar, and then brought it to the consistence of pill mass by the addition of the precipitated carbonate of iron, one 5gr. pill of which was given three times per day, with the effect of establishing perfect regularity of the bowels. I had one pill taken daily for two months, and we had the satisfaction of seeing the complexion of the patient assume a more ruddy and healthy appearance, the fainting fits reduced in frequency, and the strength improved. It would be well to state that in this case, after about one month, the use of the inspissated gall and iron pills were suspended every other night, in order to admit of the administration of a small dose of taraxicum, for its alterative and tonic effect.

This article is of undoubted utility in cases of children laboring under diarrhœa, where the stools are light colored, indicating a lack of the normal quantity of bilious secretion in the system. The well known power of bile, whether human or not, of preserving milk from coagulation, has suggested the idea of using it in cases of infants upon whose stomachs the nurse's milk curdles, producing vomiting and irritability of that organ. This practice is said to be very satisfactory by those who have ample opportunity of testing it in such cases. From the established fact, also, that a solution of gall, when poured even in very small quantities over hardened fæces which have been voided from the body, reduces it to a soft, pulpy consistence, it has led the inductive medical practitioner to use it as an injection where the rectum is filled with impacted fœces. I have used it with good effect in a marked case of this kind. We very plainly see that the mode of operation of this medicine is the same within as without the alimentary canal. Its contents are softened, thus enabling the natural peristaltic action to propel them onward. We can in this way account for their *painless* operation, while those remedies which act merely by increasing the peristaltic motion, produce such great pain. It may be urged that this medicine will prove insufficient from the fact that constipation is but a *symptom* of an unhealthy condition behind it; but whilst this may be true, it will be well to recollect that when constipation is once established as a secondary effect, it has a baleful reaction upon the system, and we think that if this symptom be attended to, the first link in the chain of morbid action will often disappear of itself.

We are living in a period of the history of medicine, which is distinguished for the application that is made of a philosophical principle commonly known by the term of "induction." By it, we understand, an inference or general conclusion drawn from the existence of one or more well established facts or propositions. The advantages which this furnishes to the modern physician could not possibly have been appreciated by the older writers on medicine, unless they could have clearly recognized the principle, and seen it exemplified in practical life. This grand system of philosophy, which was introduced by the immortal Bacon, was more readily received and more frequently used by *our* profession, probably, than any other. The enlightened medical philosopher is materially aided in his investigations of the essential character of disease, by the effects produced upon the system by therapeutical means, and from other circumstances, in the same manner as the mathematician and astronomer are aided in determining the size and distance of remote bodies, from the well known size, distance and position of those near them. This mode of investigation has been productive of more rich and valuable acquisitions to modern medical science than any which could be named. The various mechanical contrivances which have from this kind of reasoning been applied in surgery, and also the various actions of substances observable in the chemical laboratory, have furnished the greatest possible number of good practical hints to the surgeon and physician. The history of the article under consideration will serve sufficiently to illustrate this position. In the *first* place, it was brought into use in cases of constipation growing out of the absence of the normal quantity of bile in the system, from the fact that its properties, both physical and vital, are similar to that of the human. In the *second* place, its use with beneficial effect, as an injection in cases of an impacted rectum, was indicated solely by its demonstrated power of dissolving hardened fæces *out of the body*; and *thirdly*, its profitable uses in cases of nursing infants afflicted with acidity and coagulation of milk upon the stomach, was naturally enough pointed out by its alkaline property and by its power of dissolving coagulated milk and preserving it in that state *out of the body*. I will close this paper by merely expressing my ardent wish, that members of the profession will not forbear making an examination of the merits of this article, notwithstanding the apparent simplicity, for we should ever remember that the whole science of medicine is but a grand and systematic aggregate of great and *little things.*—*Ohio Med. and Surg. Journal.*

An Inquiry into the Action of the Anthelmintics. *By* Dr. Kuchenmeister, *of Zittau.* Dr. Küchenmeister has examined the various vermifuges, by immersing the living intestinal worms of fowls, cats and dogs, in albumen, at a temperature exceeding 77° Fahr., and adding the anthelmintics in the form of infusion or of powder. In some cases a mixture of warm milk and water was substituted for the albumen. The experiments were not continued for more than from forty to forty-eight hours, if the worm had not been killed before the expiration of that time. Dr. Küchenmeister made use of electricity as the most delicate reägent for proving the occurrence of the death of the worms. In the first place, electricity cannot be considered as a vermifuge. The author subjected a female *Hetarakis vesicularis,* taken from a partridge that had been killed, to the action of a rotary apparatus, which was kept up with longer or shorter intervals during an entire day. The animal was not destroyed by the experiment. He next tried the remedies employed for the removal of tæniæ, and first tested kousso in the following manner: — A living *Tænia crassicolis,* procured from a cat, was placed at four o'clock in a mixture of albumen and dolichos pruriens. The worm appeared to be perfectly well in this mixture, and at two o'clock on the following afternoon exhibited the mort vigorous movements. The tænia was now transferred to a vessel containing a mixture of infusion of kousso and some of the infused as well as some of the fresh powder with albumen. The temperature of the mixture was 30° R. (99.5° F.) On its introduction the worm quickly extended itself; after some time it was found to be dead, its color having changed to a dirty reddish yellow. Two *Tæniæ serratæ* were placed at about half-past one in the afternoon in a mixture of albumen and kousso; at two o'clock they were dying, and at three completely dead. Two *Tæniæ serratæ* from the same dog were brought in contact with kousso and milk, at half-past one in the afternoon, and at two o'clock were dead. Two *Tæniæ serratæ* were placed at half past one in the afternoon in albumen, mixed with decoction of pomegranate root and with some of the powdered root; they died in three hours. Two others were placed in milk mixed with the decoction only: they died in three an a half hours. A *Tænia crassicolis* was put into a mixture of albumen with ethereal extract of male fern; it died gradually in three hours and three quarters. A number of *Tæniæ cucumerinæ* were placed in a mixture of albumen and oil of turpentine: they were dead in an hour and a quarter.

A number of the same were put into a mixture of albumen and castor oil; they appeared lively at first, but were dead in seven hours. Similar worms were put into a salad, composed of pieces of unwatered herring, boiled potatoes, large pieces of onion and garlic, albumen, vinegar, and a large quantity of oil. They died in eight hours. Lastly, the author tested the vermifuge powers of the brown oxide of copper; fifteen grains were administered in the course of four days to a strong cat. When the body was opened, the entire intestinal canal was found to be full of fluid, yellow, flaky fæces; the intestine was softened, and denuded of epithelium, especially at the termination of the ileum, where the adjoining Peyer's glands were much swollen, particularly in two situations, one of which was an inch and a half long by one third of an inch broad; the other was nearly circular, and its diameter one third of an inch. The cat had been purged. The tæniæ and ascarides it contained were lively. It would hence appear that this substance is both inefficacious as a vermifuge and dangerous to the system. The following table contains the results of the above experiments:—

In milk boiled with kousso tæniæ died in half an hour.
In a mixture of oil of turpentine and albumen, in 1 to 1¼ hours.

In decoction of kousso with albumen,	1½ to 3	"
In decoction of pomegranate root with milk,	3 to 3½	"
In decoction of pomegranate root with albumen,	3	"
In ethereal extract of male fern with albumen,	3½ to 4	"
In castor oil with albumen,	8	"
In salmagundi with garlic and onions,	8	"

Kousso would therefore seem to be the most efficacious remedy against tæniæ. When pomegranate bark and male fern root fail, their failure may be owing to the habit of administering a laxative in from four to six hours after the exhibition the vermifuge, by which the latter may be carried beyond the worm. With regard to pomegranate root, it must be observed that in large doses it occasions diarrhœa. The same remark applies to castor oil. The author also alludes to cold water, strawberries, dolichos pruriens, and filings of tin. When tæniæ are placed in water containing ice, they are instantly benumbed, and if allowed to remain in it, they will always be found at the end of ten hours to be quite dead. Strawberries may be useful as a mild remedy in cases of tape-worm; if large quantities of them be taken on an empty stomach, entire portions of the worm will often be passed. Dolichos pruriens, with which the author tried many experiments, appears to possess no power of destroying worms. The author has also minutely studied the medicines recommended for the removal of round worms. In albumen these worms behave as the tæniæ; in water, at about 77° F., they live for some days, but swell, stiffen, become longer, thicker, and more sluggish; they lose their power of suction, and their motions become slow and only partial—they resemble leeches which have gorged themselves. In general, however, the males and young neutrals resist the effects of water longer than the mature, impregnated, egg-bearing females, which become quite rigid and inflexible, and swell considerably. Milk and whey affect the worms like water. The following are the medicines, the effects of which were tested:

1. *Camphor*. An ascaris lived from eighteen to twenty hours in albumen, into which some camphor had been introduced. 2. A mixture of oil of turpentine and albumen killed some ascarides which were placed in it from two and a half to six hours. 3. Ascarides lived forty hours in albumen and wormseed, whether the latter was employed in the form of powder or infusion. 4. Some ascarides were placed in albumen mixed with santonine; they did not die in it, nor did they die in a watery infusion of santonine. When santonine was dissolved in oil, especially in castor oil, and mixed with albumen and ascarides, the latter died in ten minutes. An injection of santonine and castor oil was thrown up the rectum of a cat, and produced numerous motions containing dead worms; and on killing the cat, the entire of the lower portion of the intestinal canal was ascertained to be free from worms, while four were found near the stomach quite rigid and extended, and retaining but little life. A *Tœnia crassicolis*, however, was found in the intestines, and appeared to be quite uninjured and very lively. 5. A mixture of albumen and anisseed, with a strong infusion of the latter, killed the worms in about twenty-four hours. 6. Parsley, mixed with albumen, killed ascarides very slowly. 7. Flour of mustard and albumen destroyed them in about four hours. 8. In rue the worms lived upwards of twenty-four hours. 9. The same was the case with millefoil. In contact with tansy, valerian and camomile, great numbers of them lived for twenty-four hours. With onions and garlic they perished in from ten to fifteen hours. A decoction of cloves, with or without albumen, killed them in twelve hours. In an infusion of ginger, with or without albumen, they lived about twenty-four hours. Petroleum, mixed with albumen, killed them in less than six hours, as did also oil of cajeput and albumen.

A series of vermifuges, taken from the class of balsamics, was tried in like manner, namely, assafœtida, ammoniacum, balsam of Peru, extract of juniper, and Venice turpentine. In all these the worms lived more than twenty-four hours. Of the class of empyreumatics (brenzlichen stoffe) the following were tried:—Oleum chaberti, [a mixture of four parts of oil of turpentine, and one of the animal oil of Dippel,] oil of amber, castor oil, tar water, creosote, wood-vinegar, and wood-soot. In these, for the most part, the worms lived from twenty-four to forty-eight hours, except the wood-vinegar, in which they lived rather more than twelve; and creosote, in which they died within two hours. Of bitters, the author tried aloes, gamboge, ox-gall, worm-wood, myrrh, gentian, quassia, hops, bitter orange, and acorus calamus; in all these the ascarides lived from twenty-four to forty hours. Of astringents, pure tannic acid, pomegranate root, kousso, extract of walnuts, cinchona bark and quina, elm bark, willow bark, the flowers and stalks of meadow sweet, oak bark, dragon's blood, catechu and kino. In these the worms died in from twenty-four to thirty hours, with but two exceptions, namely, tincture of galls and pomegranate root, both of which killed them in the space of eleven hours. Of saline preparations, sulphate of soda, chloride of sodium, and the roe of the herring, were tried. In the first the worms died in from fifteen to eighteen hours; in the second, in from two to six; and in the roe of the herring, in four hours. The following metallic poisons were experimented on:—Arsenic, calomel, corrosive sublimate, and the salts of tin, of lead, and of copper. Corrosive sublimate alone destroyed the worms in so short a time as two hours; all the other metallic salts required a much longer period. From these experiments it would appear that santonine, mixed with oil, is the most powerful vermifuge, then chloride of sodium, the roe of the herring, garlic, onions, &c. The author advises that santonine should be given as a vermifuge, mixed with oil, in the proportion of from two to five grains to an ounce of castor oil. This solution should be given in the doses of a teaspoonful until the effect is produced. As auxiliary treatment, chloride of sodium, herring brine, mustard, onions and garlic, may be employed. —*Foriep's Tagsberichte über die Fortschritte der Naturund Heilkunde.* Pharmakologie, Band 1, p. 317. *Dublin Quarterly Journal.*

ON THE INFLUENCE OF PARASITES IN THE PRODUCTION OF DISEASE. By JOSEPH LEIDY, M. D., *Professor of Anatomy in the University of Pennsylvania.*—In many animals entozoa and entophyta are almost never absent, and probably when in their natural habitation, and few in number, or not of excessive size, are harmless, as observed by Dujardin in the introduction of his excellent work on intestinal worms: "Les helminthes se dévellopent dans un site qui leur convient, sans nuire plus que les lichens sur l'écorce d'un arbre vigoureux. Ils ne peuvent devenir nuisibles, généralement, que par suite d'une multiplication excessive, la quelle semble alors être une des conséquences d'un affaiblissement provenant d'une tout autre cause, d'une mauvaise alimentation, du séjour dans un lieu froid et humide, etc.: sans cela, les helminthes naissent et meurent dans le corps de leurs hôtes, et peuvent paraître et disparaître alternativement sans inconvénients."*

Many important diseases have been supposed to originate from parisitic animals and vegetables. The former are not the true entozoa, for these are too large, and may be detected by the naked eye, but they are considered to be animalculæ so small that they cannot be discovered even with the highest powers of the microscope. But independent of the fact that the existence of such entities is a mere suspicion, none of the well known animalculæ are poisonous. At various times I have purposely swallowed large draughts of water containing myriads of *Monas*, *Vibrio*, *Euglenia*, *Volvox*, *Leucophyrs*, *Paramecium*, *Vorticelli*, etc., without ever having perceived any subsequent effect.

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* "Worms are developed in localities adapted to their necessities with as little injury as the moss which grows upon the bark of a vigorous tree. They can only become injurious, in general, when in excessive numbers, and this multiplication seems to be owing rather to debility induced by improper diet, cold and moist habitations, &c., than to their presence. Otherwise worms will be born and die in the body of their host, and may appear and disappear alternately without inconvenience."—*Translated by Ed. S. M. and S. Journal.*

The production of certain diseases, however, through the agency of entophyta is no longer a subject of doubt; as in the case of Muscardine in the Silk-worm, the Mycoderm of Porrigo favosa in Man, etc.; but that malarial and epidemic fevers have their origin in cryptogamic vegetables or spores requires yet a single proof.* If such were the case, minute vegetables and spores, conveyed through the air and introduced into the body in respiration, could be detected. The minutest of all known living beings is the *Vibrio lineola*, of Müller, measuring only 36.000 of an inch, and the smallest known vegetable spore is very much larger than this, whilst particles of inorganic matter can be distinguished the 200.000 of an inch in size.

I have frequently examined the rains and dews of localities in which intermittents were epidemic upon the Schuylkill and Susquehanna rivers, but without being able to detect animalculæ, spores, or even any solid particles whatever. I have examined the air itself for such bodies, by passing a current through clear water. This was done by means of a bottle, with two tubes passing through a cork stopper; one tube dipping into the water, the other reaching not quite to its surface. By sucking upon the latter tube, a current of air passed through the former, and was deprived in its course of any solid particles. Ordinarily, when the atmosphere was still, early in the morning, or in the evening, neither spores nor animalcules could be detected. When piles of decaying sticks or dry leaves were stirred up, or the dust was blown about by the wind, a host of most incongruous objects could be obtained from the air; none, however, could be supposed capable of producing disease.

To assert, under these circumstances, that there are spores and animalculæ capable of giving rise to epidemics, but not discernible by any means at our command, is absurd; as it is only saying in other words that such spores and animalculæ are liquid and dissolved in the air, or in a condition of chemical solution. That the air may be poisoned by matters incapable of detection by the chemist, is proved by the emanations from such plants as the *Rhus Vernix*, *Hippomane mancinnella*, etc.—*Smithsonian Contributions to Knowledge.—Virginia Med. and Surg. Journal.—Southern Med. and Surg. Journal.*

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* "See an ingenious little work by my distinguished friend, Dr. J. K. Mitchell, "On the Cryptogamous Origin of Malarious and Epidemic Fevers."

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, JANUARY, 1854.

WE take pleasure in acknowledging a very considerable addition to our list of subscribers since the issue of our last number.

Some of our friends have interested themselves to bring the Journal to the notice of many who were ignorant of its existence; for this they have our thanks. We should be pleased to have others do likewise, as there is little danger of our list becoming too plethoric just at present.

We take the liberty to send this number to some who have not heretofore been its patrons. Any one receiving it and not wishing its continuence as a subscriber, will confer a favor by returning it endorsed with his name, otherwise it will be continued.

We take this opportunity to respectfully remind *all*, that their dollar for the volume is now due, and that the postage on all numbers issued after its receipt will be prepaid.

Our thanks are due for some original matter received too late for insertion in this number.

As all will see, we begin our new volume with the year. No. 2 may be expected promptly on the first day of February.

PROSECUTIONS FOR MAL-PRACTICE. Within the last few years the attention of the profession *generally*, and of some of its members in *particular*, has been called to the subject of suits and damages in cases of alleged mal-practice. To be sure, it is no new thing, for we have been accustomed to see *poor* and *ignorant* pretenders in surgery relieved of what little property they might chance to possess; and whether justly or otherwise, while it only reached those who were no great credit to the profession, little sympathy was felt for the sufferer; and *too often*, we fear, those who felt secure in their standing and reputation, when called on to testify in these cases, have allowed themselves to make statements as evidence, which although *perhaps* their honest opinion, will be long remembered as striking proof—

"Alas! of the rarity
"Of Christian charity."

But that unchanging law of political economy that "the demand will *always* create the supply," has brought about such a crisis as was hardly bargained for. Lawyers and dissatisfied patients after being taught that it was an easy matter to plunder the medical profession by means of suits of this character, (and that many of its members were their willing allies,) were not disposed to forego the free application of their newly acquired knowledge. Their rapacity grew fast from being well fed, and as the supply of surgeons of an inferior grade, with pockets sufficiently well filled to pay the cost of plundering, grew short, they did just what might be expected, looked for *larger* and *more profitable* game. Then it was that we learned that "place and power" were impotent to protect us from swallowing the unpalatable dose which had been so freely prescribed to our less-favored brethren. Nor can we say justice is wholly blind in this matter; for while some have been taught their own weakness and mutual dependence, the whole profession has been roused to a sense of its danger, and urged by dire necessity to seek ways and means to allay the storm which threatens not only the personal prosperity of surgeons, but the welfare of the whole suffering community.

Prof. Frank H. Hamilton, of Buffalo, in view of this state of things, has by immense labor compiled a series of tables containing the results of a large number of well treated fractures. An analysis of these tables was published in the August No. of this journal.

The following letter from Prof. H. to Dr. Reese, editor of the New-York Medical Gazette, shows his high minded and disinterested object.

"BUFFALO, July 20, 1853.

"MY DEAR DOCTOR—I send you by this mail a copy of the second edition of my 'Fracture Tables,' just published. They are much enlarged by the addition of a supplement.

"Every body is looking just now to find some means of arresting prosecutions against surgeons for alleged mal-practice. Dr. Crosby seeks to accomplish this by refusing to undertake the treatment of any case of fracture until the patient or his guardian has signed a bond that he will not prosecute. Several eminent jurists inform me that such a bond is of no value or force in this State—that a surgeon cannot be released from his responsibilities. The Massachusetts Medical Society have made a report upon the subject. Dr. Gross, of Louisville, writes me that the mania for prosecutions has reached Kentucky. Indeed, I have received communications from various sources in more than one half the States in the Union, which constantly and uniformly speak of the frequency of these suits, and of their unjustness. I have thus far escaped, and so also have one or two other surgeons of Western New-York; but it is safe to say that not more than one out of every ten who practice surgery to any considerable extent, but have been compelled to defend suits of this kind.

It seems to me that the cause of all this is to be found in the fact that surgeons themselves have believed, and taught, and testified, that in a large majority of cases, broken limbs may be made perfect, while the fact is not so! On the contrary, in a very large majority of cases the limbs have been and will, I fear, of necessity, continue to be left imperfect after fractures. This is what my Tables have at length *established*. In them you see not the practice of empirics, but the practice only of the best surgeons. In not a single instance has a case been admitted which was treated by an irregular. Many of them were treated in the New-York City hospitals; some in foreign hospitals. In the examination of these cases I have used great care. I have handled and measured them all myself. The measurements were made always in the presence of medical gentlemen, and I have noted carefully every circumstance, even to the name and standing of the surgeon, and also the treatment. In the tables, however, the names of the surgeons has for reasons which you will readily understand, been always omitted.

I believe I have had no selfish motive in the labor I have thus accomplished. It has cost me much time and some money. But in this cause I have long been accustomed to spend both freely. I have testified for my brethren in nearly every county in Western New-York once or more, and I have given my testimony under commission nearly as many times more for every State around me. I believe, therefore, no one will charge me with a wish to speculate in offering this book; yet, I say frankly, I hope it will be sold, not for my own sake, but for my fellows' sake.

Yours sincerely,
FRANK H. HAMILTON."

Coming, as these sentiments do, from one who has not suffered from this cause, they, as well as his tables, constitute and will be taken as reliable evidence, which must do much to restrain this "mania" which has pervaded the whole Union.

Believing, with the editor of the Gazette, that these prosecutions "are frequently malicious *persecutions*, and successful through ignorance in the bench, bar and jury-box," we cannot too gladly welcome this array of facts;—facts which cannot be controverted, and which will do much to enlighten all who may chance to have any connection with suits of this character.

Since the above was written we have received the Montreal Medical Chronicle for December, which contains a list of cases of fracture, twenty-seven in number, treated and reported by William E. Scott, M. D., Physician to the Montreal General Hospital. Excepting three deaths, his cases are *all* reported as *perfect* cures. Among these he includes some very severe injuries, such as compound and comminuted fractures of the femur, tibia and fibula, &c. He animadverts with some severity upon the results of treatment in the cases reported by Prof. Hamilton, and more than intimates that they were not treated as well as they might have been.

The conclusion to which his article forces us is, that it would have added to the *certainty* of his *results* if he had had as *good evidence* of the state of the cure as had Prof. H., and must consider it rather unfortunate for him, in this his bid for extra fame, that his *unparalleled* success is supported by no other authority than his *ipse dixit.* No facts are so convincing as those established by plain figures, accurate measurements, and abundant reliable evidence. And it is difficult for any one man to controvert facts so established by a mere say so.

TRANSACTIONS OF THE MEDICAL SOCIETY OF THE STATE OF PENNSYLVANIA, AT ITS ANNUAL SESSION, HELD IN THE CITY OF PHILADELPHIA, MAY, 1853. *Published by the Society: Philadelphia, pp.* 126.

This volume contains the minutes of the annual meeting;—address of Dr. Carson, President of the Society; reports from the several district societies, and an essay on vaccination, small-pox and varioloid, read before the Huntington County Society, by J. M. Gemmill, M. D., of Alexandria.

The reports from district societies embrace a condensed history of the more prevalent diseases during the year, with the most approved modes of treatment.

Dr. Gemmill's essay embraces a history of the results of vaccination of thirty-five persons with virus which had become tainted with variolous poison; by which he produced genuine distinct small pox in eight cases, and from these a large number of cases by contagion; one of these, a child, had the confluent form, and died on the twelfth day; the rest he controlled and modified by vaccination with pure virus. His facts stand out clear and distinct, but we have room only for the conclusions to which they brought him. He says: "The inferences that I would draw from these facts are,

"First. We may have the vaccine virus and the small pox poison in the same scab; hence the necessity of extreme caution as to the sources whence we obtain our virus for vaccination.

Second. They show the antidotal power of the vaccine virus as to small pox poison. Hence the importance of universal vaccination.

Third. They go to show that lapse of time lessens the protective influence of vaccination; not so much, however, *the length* of time, as the period of life at which the lapse takes place. It would seem that, from infancy to puberty, the protection is lost in proportion to lapse of time; as in all the cases of varioloid that occurred in persons under the puberic age, the severity of the attack was proportioned to the age of the patient.

Fourth. They would favor the opinion, that during the changes which take place in the system at the age of puberty, a larger portion of the protection afforded by vaccination is lost than during the same length of time at any other period of life. Hence, I would infer the importance of universal re-vaccination after that period is passed.

Although the facts detailed do not bear so particularly on the point, yet I may remark, that in my experience I have never met with a case of small pox or varioloid, at any time of life, in a person who had been very recently vaccinated. Nor have I ever met with any such case in after life in a person vaccinated, or re-vaccinated, after having arrived at maturity. I have always found it to afford certain and complete protection in all such cases. In my own case, it is twenty-five years since I was re-vaccinated, and ever since that time I have been every few years exposed to the small pox contagion, frequently in its most concentrated form, without ever having suffered in the slightest degree from its effects.

These cases show the great difference which exists as to the degree of susceptibility to the influence of small pox poison amongst different persons. Out of thirty-one persons vaccinated, on two successive days, with the same virus, but eight had variola in anything like a regular form; eleven had the irregular sore arm; and in twelve no apparent effect was produced. This would seem to indicate that a wide margin should be left for exceptions, in any general rules that may be laid down as to the real amount of protection afforded by vaccination. And we might reasonably suppose, that persons who are so peculiarly susceptible to the influence of the variolous contagion, would much more readily lose a portion of the protection afforded by vaccination."

AMERICAN PHARMACEUTICAL ASSOCIATION. The annual meeting of this newly organized body was held at Boston on the 24th, 25th and 26th of August. It was well attended by apothecaries from twelve different States, and its published proceedings are interesting not only to those who regard medicines as mere articles of merchandize, but quite as much so to every physician who would have his patients supplied with pure and efficient remedial agents. The "Code of Ethics" adopted by this association will, *if adhered to*, bring the drug trade (so far as its members are concerned,) to a state of honesty to which it has long been a stranger.

The next meeting is to be held at Cincinnati, Ohio, on the last Tuesday in July, 1854.

A MANUAL OF OBSTETRICS: *By Thomas F. Cock, M. D., New-York: Samuel S. and Wm. Wood, pp.* 250. This little work makes no pretensions to originality. "It is avowedly a compilation prepared as a skeleton collection of facts" for the use of students, and as a convenient remembrancer for young practitioners in moments of emergency.

If there was any danger of students or practitioners remaining satisfied with the teachings of works of this class, we would willingly give them our unqualified condemnation; but knowing well their value, as a ground work for the study of more elaborate and argumentative treatises, we can but commend this book *to those for whose use it is designed*, as presenting *facts and principles* unincumbered by much wordy clothing. We have not room for a list of the subjects treated of, for although a *small* book, it has a *very large* table of contents; touching upon all the subjects usually taught in the more comprehensive systematic works, and may be considered an epitome of the present condition of obstetrical knowledge.

THE PRESCRIBERS' PHARMACOPŒIA.—*Third American from the fourth London edition: Edited by Thomas F. Cock, M. D.—New-York: S. S. and W. Wood, pp.* 178. Nothing need be said in praise of this book. It has been long before the public, and its value as a pharmacopœia, (*and something more,*) well appreciated. The American editor has introduced the uses of the several medicines and compounds, and an appendix containing brief and explicit directions for the diet of the sick.

NEW-HAMPSHIRE ANNUAL REGISTER. Our publisher, Mr. Lyon, is on hand in good season with this "indispensable requisite in every well regulated family." It contains, in addition to the usual statistical information, a succinct history of the higher courts of this State, from the year 1699, with some account of the judges during the same time.

DR. MARSHALL HALL. This eminent physician and world-renowned physiologist, who has visited most of the larger northern cities during the past season, has taken his departure for the south, intending to visit Charleston, Savannah, Havana, and New-Orleans.

He writes to Dr. Dowler, of the latter place, in reference to his visit:—"I hope then to make some experiments with you on your alligator. The great question is, I believe, as to *spontaneous motion* after the removal of the cerebrum and cerebellum. The *appearance* of *design* is, I believe, deceptive.

"In any case, if we do differ in opinion, we must agree to differ."

We shall look for the results of his investigations and experiments on these monsters with much interest.

ANÆSTHESIA IN MIDWIFERY, AND FATAL EFFECTS OF ANÆSTHETIC AGENTS. The undersigned was appointed by the American Medical Association to report on the above mentioned subjects at its next session in St. Louis. He therefore respectfully urges his medical brethren to make extensive and close observations on anæsthesia in midwifery, and also to analyze carefully all alleged cases of death from anæsthetic agents, and to forward the results to him before February 1st, 1854. The latter cases must be those only occurring within the present year of the association.

JAMES BOLTON, M. D.,
Richmond, Va.

Back Volumes. Our publisher, Mr. Lyon, will furnish bound volumes of the Journal at the subscription price, or will exchange bound for unbound, for the cost of binding. New subscribers who wish for back volumes can procure them, bound or unbound, at a reduced price, of the editor.

CONDENSED SUMMARY.

Chloroform in Hooping-Cough. Dr. Churchill recommends chloroform in hooping-cough, but thinks it likely to prove of more value in cases of children of twelve years and upwards than in those younger, as they will inhale it more promptly and properly. His mode of exhibition is worthy of attention. "In order to avoid the possibility of an over dose, I have never given the chloroform on a handkerchief, or by means of an inhaler, but have directed the mother, (in case of young children,) or the patient, to spill a little, say about thirty drops, in the palm of the hand, and hold this before the month and nose sufficiently near to inhale it fully, but not so close as to exclude a portion of atmospheric air. The best time to begin is just as the patient feels the irritation in the chest increasing to a cough, but if possible, before the cough commences; and the inhalation should be repeated with each return of irritation, unless headache be produced."

Small Pox. Mr. Marson, resident surgeon to the small pox and vaccination hospital, London, has published an "Analytic Examination" of the cases which occurred during four epidemics of this disease in the years 1838, 1844, 1848, 1851; of these, 3,094, rather more than one half, had been vaccinated at some period of their lives. We have only room for the author's conclusions, which were,

1st. That natural small pox destroyed about one third of all whom it attacked.

2d. That small pox after small pox, was of comparatively rare occurrence; that a second attack of natural small pox was rare, but not often fatal, and that protection seemed to be the law. That after inoculated small pox, an attack of small pox had more frequently led to fatal results; but there is reason to presume that the virus used for inoculation, like a great deal of the lymph used at the present day for vaccination, was often taken at too advanced a period of the disease, and thus did not afford the full measure of protection it was capable of affording, if taken at a proper time.

3d. That vaccination performed in infancy afforded almost complete protection against the fatality of small pox, to the period of puberty; that a variety of circumstances conspired to make it almost impossible to ascertain exactly in what proportion to the vaccinated cases of small pox subsequently occurred, or might occur, if all persons lived to an advanced age.

4th. That, as a matter of safety, it would be well for all persons who were vaccinated in infancy to be re-vaccinated at puberty; this measure being more especially requisite for those who were either indifferently or doubtfully vaccinated in infancy, and still more necessary for those who, though vaccinated, had no cicatrix remaining. Finally, as a matter of precaution, it would be desirable that all persons should be re-vaccinated, on small pox existing in the house where they were residing.

Dr. Chowne alluded to the neglects of vaccination in the country districts, which he stated to be a fault "of the government, by whom no efficient arrangements for vaccination were made, and consequently thousands lost their lives."

Mr. Marson stated that, "amongst the persons who had only been vaccinated in one place, and the cicatrix was imperfect, twenty per cent. took the small pox; whereas, when there were four cicatrices, and these were good, the number who took small pox after vaccination was only one per cent.

Oil of Turpentine as an Excitant of Uterine Contractions. Dr. C. Archer, of Va., recommends emenata of oil of turpentine, (℥j in gruel, q. s.) to reproduce labor pains which have subsided, or to strengthen those which are inefficient. Two reasons present themselves in favor of this remedy—its safety and the ease with which it can always be obtained.

Yellow Fever in New-Orleans. From the 28th of May, when the first case occurred, till Sept. 3, there were 6,919 deaths from yellow fever.

Alum as an Emetic. Dr. C. D. Meigs used alum successfully to rid the stomach of opium taken to destroy life. An ounce of powdered opium had been swallowed; thirty grs. sulphate of zinc had been given without the slightest effect; two hours after "the patient was in a somnolent condition." "One ounce of powdered alum was immediatly procured, and one half of it, mixed with a little syrup, was given to the patient, and followed in a few minutes by two or three tumblers of warm water, when copious vomiting ensued, by which a free discharge of the contents of the stomach was induced." The remedy was repeated, and the patient entirely recovered.

Irritable Stomach. Dr. Robertson recommends "painfully flexing the little finger of the patient to compel his irritable stomach to retain medicine." He says they cannot "throw up the medicine" while the painful flexure is maintained. *Dr. T. S. Bell* uses a tumbler applied as a dry cup over the stomach. *The N. O. Med. and Surg. Journal* recommends good champagne wine and ice. *Dr. Bowling*, of the Nashville Journal, considers *frozen* champagne as *the* remedy; he says, "in the case of a sound stomach, we feel authorized to say that one that would reject ice-champagne, under any circumstances, might be set down as unreasonably fastidious and refractory."

On the means of arresting instantaneously Cholera Cramps in the Limbs. By M. Guyon. In a recent communication to the Académie des Sciences at Paris, M. G. states that these spasms may be immediately arrested by firm and steady extension of the cramped muscles. In the case of the leg he directs the heel to be held in one hand and the foot bent towards the shin; in that of the arm the fingers are to be straightened, and the hand carried towards the dorsum of the wrist.

Amenorrhea. Dr. Plumer, of Richmond, Virginia, reports the successful treatment of Amenorrhea with half ounce doses of the lig. acet. ammonia, properly prepared with dilute acetic acid.

Dysmenorrhea. In Germany the bi-borate of soda is used in conjunction with ergot, to produce uterine contraction, and alone to facilitate the excretion of the menstrual fluid. Dr. Bennett, of London, regards it as an important agent in fulfilling the latter indication, and employs the following formula in many cases of dysmenorrhea:

℞. Magnes. carbon. gr. v.; pulveris rhei. gr. ij.; soda biboratis, gr. x.; infusi calumb. ℥j.; ter die surmend.

Chapped Nipples. Take of olive oil, ℥x.; venice turpentine, ℥ij.; yellow wax, ℥j.; alkanet root, ℥ss.; boil together, strain, and add balsam of Peru, ʒijss.; camphor, gr. x.; stir constantly until cold. This is highly esteemed for chapped nipples and broken chilblains.

Strangury from Blisters. Dr. Anderson, of Alabama, believes that strangury can uniformly be prevented "by smearing the plaster with oil of turpentine" before applying it.

Croup. M. Trousseau praises the sulphate of copper as an emetic in croup, as recommended by Beringnier. This emetic appears to influence the pharynx more than the stomach, and the efforts it induces often detach the false membranes from the air passages. M. Beringnier gives two or three grains, but M. Trousseau gives ten in two doses.

Oil of Pumpkin-seeds for Tape-worm. Dr. H. S. Patterson, of Philadelphia, recommends, in the Oct. number of the *Medical Examiner*, the oil of pumpkin-seeds for the treatment of tape-worm. He reported in the same journal, in October of last year, a case of radical cure by an emulsion of these seeds, after turpentine and even kousso had signally failed. He reports a case which came under the care of a medical student in that city, in which the oil was used by him at his request, and with the happiest result. Half an ounce of the oil was given in the morning, and the same quantity in about two hours more, followed at the end of another two hours by an ounce of castor oil, with the effect of bringing away a considerable part of the worm; and as the patient had been entirely free from every symptom of verminous irritation from May to September, he thinks there is no doubt that the worm is entirely destroyed. The oil is obtained from the seeds by cold expression.

Fœtus in Utero killed by Lightning. Dr. Carithers reports, in a late number of the *Southern Medical and Surgical Journal,* a case of a woman, 40 years of age, in good health, who was struck with lightning, and on the tenth day after was delivered of a dead child, which, from the appearance, had been so from the time the mother felt the shock.

THE

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[For the N. H. Journal of Medicine.]

SCARLET FEVER, AND THE INFLUENCE OF MEDICINE IN ITS CURE.

MR. EDITOR :—No doubt many who glance their eyes upon the caption of this article, will, at first, determine to peruse it, from the fact that they naturally anticipate being called upon to attend cases of scarlet fever during the winter months; but when they read the closing clause, they will mentally exclaim, "What ignoramus is this who proposes to call in question the power of medicine in the cure of scarlet fever?" Every body knows what medicines are recommended in the treatment of this dread disease. The works on Theory and Practice abound in full and minute dissertations, first on its history, then on its causes, nature, symptoms, complications, varieties, and its method of *treatment*, but unfortunately for the welfare of the young and innocent victims of this terrible scourge, the power of medicines in controlling the disease, or even the remedy proper to be administered, does not appear to be decided with any degree of unanimity.

It will be recollected by the readers of the "*New-Hampshire Journal of Medicine,*" that one of the earlier Nos. of the periodical contained an article from the pen of the writer of this, on the subject of "*Measles and other Eruptive Fevers,*" in which I attempted to prove, in accordance with the theory of Leibig, that all contagious eruptive fevers, originate essentially from the inception into the blood of some substance foreign to the human system in its normal condition, and that this additional matter induced a change, or ferment, not only in the blood, but in the other structures of the body in a manner similar to that produced by leaven, or ferment, when added to a compound that is capable of undergoing fermentation, and that in all the various *eruptive self-limiting* fevers, the office of the physician is, not to attempt to *cure* the disease, or to put a stop to the change which has already commenced, for that cannot be done; but he should confine his efforts to the endeavor to modify and control the activity of the different parts of the organism, so that the change may occur in the quietest and mildest manner, and with the least damage to all or any of the organs.

If these propositions are true, (and thus far I have not learned of an attempt to controvert them,) then the idea of any medicine, or any course of treatment *curing* scarlet fever, is evidently preposterous.

What then shall the physician do? Shall he abandon this class of patients to the tender mercies of the quack, and the kind-hearted but ignorant nurse? By no means! Neither should he resort to quackery or emperical treatment on his own part. The many headstones in the cemetery, and the aching void in the hearts of bereaved parents, cry out against it, and no *true* physician will be content to see the little angels passing from this world before their time, without a desire on his part to *guide* the system through the dangers and complications of this fell disease, *until the change has occurred*, and the abnormal action ceases, from the fact that the poison has either expended itself, or has *leavened the whole lump*, and thus the fermentation or inflammation ceases.

What this leaven, or the contagious poison of scarletina is, no one knows, any more than is known in regard to that of measles, small-pox, or the kindred exanthemata, therefore it is useless to attempt to throw any light upon the matter, except by carefully noting the effects produced by it. That it is generated by the bodies of those laboring under this disease, must be admitted by all, but that it *always* originates thus, but few will assert. Circumstances and facts have come under my observation, which fully convince me that many cases of scarlet fever that I have been called to treat, *could not* have been the result of contagion; and among others, I may be allowed to state, that in one school district the disease originated regularly in the latter part of winter or in early spring, each year, for several years in succession, and again, during the prevalence of an epidemic in the month of March, some four or five years since, (I cannot give the precise date, as I have not my note book with me,) I was called to attend three families of children sick with this disease, high up upon the Green mountains, which families were several miles apart, and the children of neither family had been from home for many weeks, being blockaded by a great depth of snow.

In regard to the manner of guiding the little patients through their danger, we cannot do better than to study *nature*, or in other words see what occurs in the system of those who suffer but little, and also observe the source of suffering in those in whom the disease is more severe or fatal.

The most notable symptom, is the injection of the cutaneous capellary vessels with the arterial blood. This it is which gives the *scarlet* hue to the skin, which is characteristic of this fever. Soon all the elements of acute inflammatory action are present, and that too in the tissue of the skin to so great an extent oftentimes that the cuticle is destroyed,—dies—and is thrown off either in small shreds and patches, or, as is frequently the case, in large and broad pieces. While we can *see* the extent of the inflammatory action in the skin, we can infer that it is no less in the internal structures, and there is danger of its being so severe as to produce structural disorder and change that will be irreparable, and consequently produce death. We must therefore do all we can to control this inflammatory action. But how? If we give purgatives, we shall irritate the mucus lining of the alimentary canal, and we need but look at the lining of the mouth and fauces, as well as that of the eyelids, to discover that already the irritation here is equal to that of the surface, and beside, purgatives will lessen the vital energies of the system, and they are already depressed by the diseased action. Emetics, especially those of tartarised antimony and potassa are patent to the same objections, and those from any other substance must irritate, but at the same time they may relax the sweat pores, and allow of relief in that way, therefore they *must* do harm, but *may* do more good in one direction than harm in the other. They should be used with extreme caution, if at all.

Bleeding is evidently entirely out of the question, as it cannot by any possibility do good, except in the same manner as emetics, by producing a relaxation of the exhalent vessels, and the chances for this result are not one in the thousand. Opium can be of use only as it quiets the action of the system, and thus allows the patient to *rest*, while at the same time it tends to close up the outlets by which the morbid matter must be removed from the system if it be removed. All the various applications in more common use, internally and externally, at the throat, are liable to similar strong objections. Strong vinegar and capsicum would produce inflammation and ulceration in a well throat, and cannot be supposed likely to prevent a similar catastrophe in one suffering from disease, except on the principle of *simillia similibus curantio;* and if administered on that principle, the large doses should be repudiated. Blisters and violent stimulation, externally, although not quite so horrid and objectionable as the internal treatment referred to, yet no one can *reason* himself into the belief that his own throat could resist the invasion of disease any better for being blistered or parboiled; and the cantharides should never be used on any part of the system in this disease. The tendency to dropsical effusion is greatly increased from the stoppage of the renal secretion consequent upon the absorption of cantharidin, and certainly the physician does not want to augment the danger from that source.

But the impatient reader may wish to know what *positive* advantages can accrue from this list of negations. Dear man, it may set you to thinking, and it is to be hoped that there is remaining in your cranium sufficient *vis vita* to make that operation profitable to you, and perhaps to your patients. Did you ever produce active cutaneous inflammation by bringing a part of your own surface in contact with a hot iron? or in any other mode, did you ever enjoy the pleasure of experimenting on the influence of the *atmosphere* upon the cuticular extremities of the nerves, when those nerves were in a state of excitement? If so, did you not by experiment, discover that that pleasant inflammatory action could be lessened by cutting off the contact of the atmosphere with the nerve? Will not that class of experiments teach us that in scarlet fever, we should keep the surface from the influence of the atmosphere? not by rubbing it over with rancid bacon, as has been recommended by some—but by placing the patient in a *clean* and *warm* (not hot) bed, and then giving *sage* or *catnip* tea, or any other agreeable and non-stimulating nervine, which will also act as a sudorific.

Catnip and sage will supply the place of objectionable articles, and are really remedies of themselves of no small power, especially the former. The throat, inside, cannot be protected from the air, but the atmosphere inhaled can be kept pure and moist, and should be so, as long as there is any disease of the skin or mucus membrane. The bowels should be kept open by mild injections, and the entire surface frequently wiped with a cloth moistened in pure warm water, or water with a little milk. The stomach should be supplied with only such nourishment as it can digest perfectly, and the patient kept strictly under the charge of the physician until fairly convalescent, and the new skin that takes the place of the old one, has had time to become fully formed.

Now, Mr. Editor, if the above views are heretical, I would like to be told wherein, and I would like to be able to test the power of salvation from death from scarlet fever, in all its forms, when treated in this let-alone manner, as compared with the heroic methods in use among the orthodox and heterodox practitioners; or as compared with that treatment when either emetics, cathartics, calomel, blood-letting, blistering, or, No. 6, lobelia steaming, or any other process of *cure* is adopted. I do not write this in a boastful or vain-glorious spirit, for we all know that we have little reason enough to congratulate ourselves on our success in treating this disease, but partly because I feel that I am correct in my views, and also in part, to *provoke* a friendly controversy with any one who may choose thus to notice my views.

Yours truly, C. H. CLEAVELAND.

Dec. 12, 1853.

DOVER MEDICAL ASSOCIATION.

Address of Levi G. Hill, m. d., *President of the Association.*

Gentlemen:—It seems but just the other side of yesterday, when we were discussing the merits and propriety of organizing the "Dover Medical Association." Yet three years have already passed, since our organization was effected, and we are entering a fourth. The occasion, very naturally, leads us to reflect upon the occurrences of the past; and now, especially, the past year. Furthermore, the example of our first President, at the annual meeting when he was reëlected, in presenting a paper before us, may be regarded as a precedent for future officers. That paper was brief, but interesting and instructive. It gave an account of the various exercises at the several meetings during the year, and ended with the relation of a very interesting case of convulsions.

I have chosen to follow that example in two particulars, viz: first, in presenting a paper, which drawn up hastily, may not be satisfactory, even to myself, yet may pass for its turn. Secondly, in its brevity. This last, I regard as a virtue or quality of no small importance, for in these days of lightning speed, when rapidity and brevity seem to mark every thing, lengthy communications are rarely read, or if read, it is with little interest, and that little lost before the reading is ended. I shall, therefore, briefly allude to some of the occurrences and transactions of the past year.

During the year just closed, the members of the Association have enjoyed uninterrupted good health, with two exceptions. Dr. Martin suffered severely for a time from bilious and renal difficulties, experiencing severe pain, fever, &c. For a time considerable apprehension was felt for his safety, but under the use of veneasection, calomel, opiates, baths, &c., his convalescence was soon established, and in due time he was completely restored to good health.

Dr. Horne was attacked, somewhat suddenly, with congestion of the lungs; raised considerable blood, had high arterial excitement, cough, &c., but the symptoms yielded readily to cupping, blisters, calomel, antimony, mucilages, &c. No one of our members has died.

Since our last annual meeting the committee appointed for that purpose has procured the suit of rooms we now occupy. It having been represented to Capt. Paul, agent of the Cocheco Manufacturing Co., that we wanted a suit of rooms in the Company's blocks, for our meetings and for clinical purposes, he expressed himself pleased with our objects, and cheerfully offered us the gratuitous use of the rooms asked for; and by the liberality of Messrs. Geo. P. Folsom, A. & J. B. Folsom, A. C. Smith, E. J. Lane, C. A. Tufts, and others, our rooms have been furnished with much that was necessary for our convenience and success. Other articles of furniture, plates, instruments, apparatus, &c., have been purchased by the committee and are placed in the Hall for the use of members here or elsewhere. The rooms are furnished in a neat and substantial manner, and seem well adapted for our purposes.

Since our clinic was opened last autumn, we have received patients, according to the record, from this and several of the neighboring towns, and so far as the record goes or we can learn, the cases have progressed favorably: but it is to be regretted that we cannot follow out, or have the progress and result of treatment fully reported in all cases for which we prescribe. Nevertheless, it is believed, that although this charity is being known through the newspapers, whose publishers generally advertise it without charge, it will, when more generally known and understood, have numerous calls and do great good to the community.

Our meetings have usually been interesting and instructive, not always because the appointed orators have been punctual and read valuable papers; but when these have failed there have been those present who were prepared to report cases or discuss questions of interest and importance to the physician and surgeon; and some of these meetings have been among the most interesting and valuable of the year. Drs. Martin and Smith, holding important political positions, were of necessity at the capital of the State during a portion of the year, and consequently we were not as often favored with their presence or communications as formerly.

The funds of the Association amount to about three hundred dollars, derived from doing the pauper business. For further particulars I must refer you to the Treasurer's report.

The advantages of such organizations, if properly conducted, are many and great; and if each member of our Association will be prompt in his attendance and furnish his quota of "subject and matter" for the observation and investigation of his brethren, this Society and its members will flourish and prosper as we progress and time advances.

Allow me to suggest that no ordinary business or affairs should keep us from the meetings of the Association, if we wish it to prosper as it ought. The social and fraternal feelings that are begotten and cultivated at our meetings, to say nothing of the scientific or practical knowledge we may acquire or develop, is to me ample compensation for the time and sacrifices I may make to be present at every meeting when practicable, and I am confident all may usually attend if they have sufficient interest and are disposed to do so. No object, however good or desirable, can be accomplished without exertion; and if we would have the "Dover Medical Association" do all that we have hoped and expected, we must make efforts and continue to exert ourselves for the accomplishment of what we desire.

I can only say in conclusion, let us all do what we have it in our power to do, and this Society shall not live in name only, but in prosperity and great practical usefulness.

[For the N. H. Journal of Medicine.]

CASE OF OVARIAN TUMOR.

BY W. H. H. RICHARDSON, M. D., EAST MONTPELIER, VT.

R. T., aged 29, widow and mother of five children, first sought medical advice on the 30th of May, 1850. She had enjoyed good health until three years since, when she discovered a tumor in the right iliac forsa, which, (she said,) had "constantly increased up to this time." Since the first discovery of the tumor she had borne one child.

When first examined her general health was quite good—cateminia regular—bowels somewhat costive. The tumor appeared to be ovarian,—to contain no cysts, (as there was no crepitation upon manipulation,)—about six inches in diameter, and to have great mobility.

A vaginal examination discovered the mouth of the womb to be in a state of ulceration;—these ulcerations were cauterized with nit. argent. once a week until they healed. Blisters were applied over the tumor in front and a dressing of ung. potass. iodid.

On the 24th of August the tumor seemed to have considerably decreased, but there had been occasional uterine hæmorrhage accompanied by tetanic convulsions, (supposed to depend upon uterine irritation,) and occasional colicy pains in the right iliac region.

On the 28th of August symptoms of acute peritonitis appeared, of a local character, and confined to the region of the tumor, at which place the tenderness on pressure was excessive; elsewhere it was not well marked.

She was treated actively,—with calomel and opium, and blisters to the region of tenderness.

Aug. 29. The symptoms were better; less tenderness on pressure over the tumor, but a peculiar sensation of crepitation which was attributed to recently effused lymph, connecting the surface of the tumor to the parieties of the abdomen. The tumor was now fixed in its position, having lost all mobility. By the first of Sept. the symptoms of peritonitis had mainly disappeared, but those of an intense enteritis were manifested; pulse, 120, small and wiry,—extremities cold—face pinched and sunken—great precordial anxiety, and frequent profuse watery discharges tinged with blood. These acute symptoms were by active treatment subdued, but the patient gradually sunk, and died on the 8th of Sept.

Autopsy twelve hours after death. The parieties of the abdomen were found adherent to the surface of the tumor, which was of a very dark color, and at points greenish. The peritoneum in contact was stained dark by imbibition. The small intestines and colon were every where adherent to the tumor, which was found firmly fixed in its position, but the adhesions were easily torn through, being evidently recent. No fluid was found in the peritoneal cavity nor any evidence of peritonitis, except in the region of the tumor. On separating the tumor from its adhesions, it was found to be attached to the uterus by the right broad ligament, and, *in fact*, to consist of the right ovary.

The pedicle of the tumor was found in a very short tight twist, which appeared to have resulted from the revolution of the tumor on its axis one and a half time. The veins on the distal side of the tumor were very much distended. Internally the tumor was deeply stained with blood, having been intensely congested. It was fibrous, with irregular cavities in its centre.

The mucus surface of the large intestine had evidently been the seat of severe inflammation, it was thickened, softened, and very red from minute extravasations. The small intestines were not essentially diseased.

The revolutions of the tumor, doubtless, caused the colicy pains, — then congestion and engorgement, which gradually passed into inflammation.

I do not recollect to have heard or read of a similar cause of death.

[For the N. H. Journal of Medicine.]

ALUM AS AN EMETIC IN CROUP.

Mr. Editor :—I notice in the Jan. No. of your Journal a remark upon the use of alum as an emetic in cases of poisoning by opium. This leads me to add my testimony to its use in cases of *true* croup.

While spending the winter in New-York in 1849–50, Prof. Parker, at the College of Physicians and Surgeons, took occasion in one of his lectures to say that serious doubts were entertained by many, eminent in the profession, as to our ability to cure a case of true croup. At the close of the lecture an elderly and respectable physician from South-Carolina, arose and said that for many years he had made use in his practice of alum emetics for breaking up the recent formations of false membrane in cases of true croup, and that he considered the practice not only entirely safe, but very successful.

For three years I have used this remedy in croup, and in that time have not seen a fatal case which was treated with it from the beginning. I do not recommend it as a specific, but I believe it to be a very safe and efficient remedy. I have usually given about ten grs. once in ten minutes, until vomiting is induced. I do not omit, whilst using the alum, to use the tartar emetic or the hive syrup freely,—for this acts to subdue the inflammation, while the alum has more of a revulsive action.

If you have a case of croup, (uncomplicated, "pure and simple,") try it, brethren.

W. H. H. R.

AN ESSAY ON SORE THROAT, OR CHRONIC PHARYNGITIS.

Read before the Memphis Medical Society, May 1852.

BY A. P. MERRILL, M. D.

THIS disease is of frequent occurrence, sometimes being caused by acute inflammation of the lining membranes of the throat, and sometimes by scarlatina, measles, exposure to cold, etc. It consists of a sub-acute inflammation or hyperemic condition of the mucus membrane of the pharynx, frequently involving the tonsils and palate, the glottis and epi-glottis, and extending into the nares and eustachian tubes, and even into the external meatus of the ear. The membrane presents in these cases a highly vascular condition, and sometimes an evident thickening or hypertrophy, and not unfrequently an œdematous tendency.

In cases of severity there is a pretty constant tickling in the throat, producing a disposition to cough or to hack; a feeling of irritation and roughness about the palate and glottis; painful deglutition, and an increase of all the unpleasant symptoms consequent upon an overstraining of the voice, followed by hoarseness, and in some instances by temporary or permanent aphonia. In such cases, the secretions from this membrane are nearly suspended; but with a partial abatement of vascular action, a viscid mucus is formed, which adheres closely to the surface, and by the irritation it produces, causing coughing.

As in other cases of sub-acute inflammation of the mucus membranes, a long continuance of this disease sometimes leads to ulcerations. The ulcers are generally of a phagedenic character, spreading rapidly, with considerable waste of substance, and exceedingly sensitive to the touch. The act of deglutition, while these ulcers exist, is attended by acute pain, like the thrust of sharp instruments into the flesh. Sometimes the ulcerative process is of the pustular character, producing pustules or pimples considerably elevated and filled with matter. This form of the disease has been called "Follicular Pharyngitis."

Chronic pharyngitis sometimes has its beginning in early youth, and continues without any very urgent symptoms for many years. Persons troubled with this form of the disease are apt to experience a tickling in the throat, attended by a collection of viscid mucus, and a disposition to cough, or to hawk, upon every sudden transition from warm to cold air, and particularly upon first going out in the morning, in cold and damp weather. But these symptoms pass off as the day advances and the system becomes warmed by exercise.

When the hyperæmia and turgescence are much increased from any cause, a rupture of some of the engorged blood-vessels is a common occurrence, and the patient ejects mucus tinged with blood, which is hawked up from the throat. By close attention to this act, it is easy to distinguish such cases from those of bronchitis, in which bloody sputum is coughed up from the lungs. And it is not difficult for an experienced observer to distinguish pharyngitis in all its stages from laryngitis, trachitis and bronchitis, even by the act of coughing or of ejecting sputum from the throat by convulsive efforts, which are short of coughing, generally called hawking or clearing of the throat. Pharyngitis leads to the establishment, of those other diseases, however, by the extension of the diseased action into the air passages, and then the two affections exist together. This is the result so much to be dreaded, and which makes the early and skillful treatment of the disease of the utmost importance.

Habitual coughing, to a greater or less extent, is a common symptom attending pharyngitis, and it is one which requires our particular attention. I believe it is a well ascertained fact, that the lungs cannot be exercised by frequent and long continued coughing, from any cause, without danger of the most serious consequences. The bronchial tubes are certain, sooner or later, to take on an excited and diseased condition from this convulsive movement, with every danger of hæmorrhage and ulceration supervening, attended by hectic fever and other characteristic symptoms of phthisis pulmonalis. Indeed, a large majority of the cases of consumption which I have met with, have had their origin in a cough proceeding from the irritation caused by chronic pharyngitis. Persons of a strumous habit, and those who labor under the disadvantages of an hereditary taint, are perhaps more liable to this result than others, and experience its fatal influence in a shorter period of time; but the exciting cause is the same, and the course of the disease very similar.

This disease is commonly called *bronchitis*, but this is an erroneous designation, for the bronchital tubes are not primarily affected, and when they do become seriously involved in the diseased action, it is not long before a name of more fearful import is assigned to it. We hear then of consumption, and not bronchitis.

Public speaking is one of the most exciting causes of pharyngitis, and clergymen, therefore, appear to be particularly obnoxious to it. This arises mainly from the unnatural and labored efforts which they are accustomed to make, together with their want of knowledge of the physiology and philosophy of the human voice. These efforts are in some cases repeated very often, in consequence of the high estimate which Christians of the present day place upon much preaching; and they are frequently made in over-heated and corrupted atmosphere, the transition from which to a cooler and purer medium, in a state of fatigue and exhaustion, has a strong tendency to enhance the ill effects.

The usual remedies for this disease are counter-irritants externally, and stimulating and escharotic applications to the diseased surface. The former consist of blisters and various kinds of stimulating embrocations, accompanied by the use of flannel or silk to protect the throat from the influence of the cold air. The beard is sometimes permitted to grow for the same purpose. Sometimes a contrary course has been pursued, and the whole neck has been bared to the weather, with frequent cold ablutions, general cold bathing, and even the application of ice. These various remedies have their advocates, and no doubt all have proved useful under certain conditions.

The applications made to the throat, internally, are capsicum, the sulphates of copper and zinc, nitrate of silver, etc. Capsicum has been found very useful in many cases, from its actively stimulating effects upon the torpid vessels, by which they are made to contract their calibres, and thus reduce the prevailing hyperæmia. A healthy secretion of mucus sometimes follows this application, and a consequent relief of urgent symptoms. The principal fault in its application consists in its being prescribed as a gargle. Used as such, in the general acceptation of the term, it does not reach, to much extent, the diseased surface, but comes in contact principally with the mouth and lips, annoying the patient by its burning stimulation, without much influence over the disease. The best way of applying it is by the use of a camel's hair brush, or a bit of sponge, using a strong decoction, and washing it well over the diseased surface. Or, if the patient throws back his head, and by the use of a small spoon carries a few drops far back upon the root of the tongue, and then swallows with the throat in this straightened position, he will bring the liquid in contact with a considerable portion of the diseased membrane, and avoid at the same time its unpleasant effects upon the lips.

The nitrate of silver has latterly been in higher repute in the treatment of this disease than any other topical remedy; and it is at this time, I believe, more generally prescribed. It is no doubt valuable, and I have myself witnessed the happiest effects from its application, both in solution and in substance. In one case of considerable violence, however, phagedenic ulcers formed in the throat while the patient was applying a strong solution of the nitrate of silver to the part affected, three times a day. These ulcers were cured, and the disease greatly relieved by the substitution of a solution of sulphate of copper. But I need not pursue this subject of treatment, which is so familiar to you all, and will therefore proceed, without further remark, to the special object of this paper.

It will be recollected by some of the members present, that several months ago I invited the attention of the society, verbally, to the use of iodine as a topical application to the internal throat, in this disease. I had at that time only a limited experience with the remedy, but had witnessed remarkable effects from its use in several cases. And now, after some further trials by myself and others, I am so far confirmed in my favorable opinion of the remedy, as to feel myself called upon by a sense of duty to the profession, to the society, and to mankind, to direct your attention to the subject in a more formal manner.

Having been in the constant use of this remedy in my practice for more than a year, and having succeeded in relieving several cases of chronic pharyngitis with it, which had resisted the use of other active means of cure, I now venture to recommend it as a valuable remedy, and to request the members of this society to put its merits to the test of experiment, as they have opportunity, and to report the result to the society.

The following is a convenient formula, which may be applied to the throat, with a camel's hair brush, once or twice a day, or as often as the patient feels a tickling sensation or a desire to cough. Persons afflicted with this disease will find it advantageous to have the remedy at hand during the night, so that the cough may be arrested at once, whenever it becomes troublesome:

℞.	Iodide of potassium	ʒj.
	Iodine	ʒss.
	Water	℥j.
	Gum Arabic	ʒij.
	White sugar	ʒij.—Mix.

For the external meatus of the ear the following is used:

℞.	Iodide of potassium	gr. vj.
	Iodine	gr. iij.
	Water	℥j.
	Glycerin	ʒij.—Mix.

In some cases of long standing this solution proves to be too weak. It should be of strength to produce a slightly burning sensation. The glycerin is important on account of the dryness of the meatus, which nearly always attends these cases, and this may be increased at pleasure. A few drops may be put in the ear once or twice a day, and in cases of severity, or insensibility, a lock of cotton may be charged with the solution and suffered to remain in the ear. It must be borne in mind, however, that in many cases of diseased ear, the meatus externus is extremely sensitive, and will not bear the application of iodine. Proper caution should therefore be observed in its use, lest it prove too stimulating and give pain.—*New-Orleans Journal.*

NON-FATAL ACCIDENTS FROM ANÆSTHETICS, WITH OBSERVATIONS.

Read before the Medico-Chirurgical Society of Cincinnati.

BY W. H. MUZZEY, M. D.

Recently, in one of the courts of justice in Paris, two surgeons were condemned to pay a fine (merely nominal) for allowing a patient to die under the effects of chloroform. The court sustained the following allegations, and hence its decision:

1st. That chloroform was unnecessarily administered, as the operation to be performed was not of sufficient magnitude to justify its employment.

2d. That the room was not sufficiently ventilated.

3d. That no provision had been made against accident.

In view of the last point, the very natural question arises, What precautions against accidents should be taken by those administering anæsthetic agents?

One answers, that no death has occurred from the use of sulphuric ether, and therefore there need be no apprehension from its administration; another has never *heard* of a death from chloric ether, and claims for *it* great advantages over other agents; whilst the advocates of chloroform attribute all accidents to the *impurity* of the article.

It is not my purpose to discuss the comparative merits of these agents, but I am persuaded that each, however pure it may be, will meet with idiosyncracies forbidding its administration.

In death from anæsthesia, there is suspension of respiration from paralysis of the nerves presiding over this function, and consequently, suspension of the heart's action. To reänimate, M. Jobert de Lambelle (of l'Hotel Dieu) counsels the use of irritants to the skin, currents of air passed over the body, excitants applied to the tongue, cauterization of the mouth and throat with ammonia and currents of electricity. M. Ricord remarked to me, that artificial respiration alone, if persevered in, would prevent fatal results, and instanced three cases in his own practice, which were saved by that procedure.

The following case will illustrate the value of the suggestion; but first a word as to the agent employed, and means of its administration. We have used for four years the mixture of one part (by measure) of chloroform, and two parts of washed sulphuric ether, both of which are from the manufactory of Messrs. Powers & Weightman, Philadelphia. The vehicle for administration is a large silk handkerchief (an old bandanna) of very loose texture, which has been used for this purpose solely for four years. This is shaken out of its folds and gathered lightly in the hand, and usually a fluid drachm of this mixture is put upon it, and it is held lightly over the face, covering the nose and mouth. If there is much irritation of the lungs, the handkerchief is removed from time to time till it ceases, and when the patient is sufficiently quiet for the commencement of an operation, we not unfrequently add a little fresh material, and leave the handkerchief upon the face for a few minutes.

June 6th, 1852.—Michael O'Hara, native of Ireland, emigrated seven years since; is 27 years of age, of sanguine temperament, full habit, capacious chest, has great muscular development, and weighs 170 pounds. Once in two or three weeks drinks freely of whiskey for two days, and works steadily in the intermediate time. Had a "spree" for two days last week.

Eight months since, was working under a bank of earth, which caved upon him and injured his back, since which, has had incessant pain in the lumbar portion of the spine, notwithstanding internal medication and the application of cups, blisters, and irritating ointments; now, pressure over the third lumbar vertebra produces pain.

15th.—Propose to apply the actual cautery over the spine.

16th, 8 o'clock, A. M.—At the patient's lodgings, an Irish lad of 16 years present with us. Patient has eaten nothing for 13 hours; is lying on his back in a room ten feet square; the head of the bed is under an open window, and at the foot, the door stands open. Circulation full and strong, with 80 pulsations per minute. Commenced the administration of the mixture of chloroform and ether. The first approach of the handkerchief to the face caused slight coughing, which soon subsided. In four minutes the patient became very loquacious, jabbering in Gaelic, and made great muscular exertion, (usually the case with Irish patients,) and muscles became rigid; pulse 70. The handkerchief was removed for 30 seconds; the muscles relaxed; the respiration became disembarrassed, and pulse 65. Inhalation was resumed and continued for one minute, when I considered the effect nearly sufficient. Pulse 60, full and regular. Putting half a fluid drachm of the mixture upon the handkerchief, I left it upon the face, and stepped below stairs for the heated iron, leaving the lad with the patient. (The iron was in a stove 25 yards from the bedside, and I found subsequently, on going over the ground with the same expedition, that I was absent from the room forty seconds.) On my return the wrist was pulseless, and the action of the lungs and heart entirely suspended. I shook the patient, dashed water in his face, turned him upon his side, then upon the back again, gave various positions to the head, pressed upon the chest to expel the air from the lungs and allow fresh air to replace it. This was kept up for one minute. I then placed myself on the bed at one side of the body, and with my own mouth upon that of the subject, inflated the lungs, then expelled the air by pressure upon the chest, and allowed the pure air to take its place; this in turn was expelled, and the lungs again inflated by my own. In this manner I kept up artificial respiration for the space of three minutes, every alternate inflation being from the atmosphere. Suspending these efforts for a few seconds and seeing no signs of life, I despatched the lad for a professional friend, and resumed artificial respiration. After one minute, I thrust my finger into the throat, and agitated the epiglottis, in hopes to provoke a spasm of the glottis, but without success. Continued artificial respiration for another minute, and a second time thrust my finger into the throat, with no better success. Artificial respiration for half a minute, and a third time thrusting my finger into the throat, but deeper than before, so as to penetrate between the cords of the glottis, I suddenly withdrew it, but immediately repeating the movement with greater violence, the much wished-for "spasm" grasped my finger, and there was a slight quivering motion of the chest. Artificial respiration resumed, and in two minutes the patient had no need of my assistance.

He was still insensible, but the application of the iron, which was reheated, partially aroused him. Five minutes after, he was perfectly sensible, complained of great weakness, but had no idea of the peril he had passed through. Half an hour later he seemed as well as patients ordinarily are after the use of chloroform, and subsequently there were no unusual symptoms.

The amount of the mixture used on this occasion was six fluid drachms—two of chloroform and four of ether.

There was no pulsation of the heart, or respiratory movement for seven minutes.

Reänimation is attributable to artificial respiration and irritation of the glottis.

Cincinnati, Sept. 20, 1853.

Since preparing the foregoing, I have witnessed another case of the unfavorable effects of an anæsthetic agent.

Mr. L., farmer, aged 49 years, height five feet ten inches, moderately fleshy, and of lymphatic temperament.

OCTOBER 12th, 11 A. M.—Patient in the horizontal position; has not eaten for 17 hours; pulse 95 per minute. Commenced the inhalation of the mixture of chloroform and ether. There was slight irritation of the lungs at first, which occasioned some delay. At 11 o'clock, 10 minutes, partial anæsthesia; respiration easy; pulse 80. One minute later, the pulse suddenly dropped to 60, and I removed the handkerchief. There was but little respiratory action; the muscles of the chest were quiet, and those of the abdomen moved feebly. Pulse rose to 18 for a quarter of a minute, and immediately fell to 13. The movement of the abdominal muscles ceased, but only one respiratory movement was lost, as with one hand I opened the mouth; and with the other made pressure upon the chest. Three movements of this kind gave sufficient impulse to the respiration, and no farther assistance was necessary. The pulse steadily improved. A little water was thrown in the face, and the patient returned to consciousness ten minutes after, and for several days he complained of great weakness. Eight days subsequently, with great composure, (without anæsthesia,) he submitted to the extirpation of a large tumor of the neck, previous to which I ligated the primitive carotid artery.

Six drachms of the mixture were used.

The facts in this case strengthen the position assumed in connection with the other, viz.: that the derangement of the circulation is consequent upon impaired respiratory action.

My father, Dr. R. D. Mussey, informs me, that a year since, on account of untowerd symptoms similar to the above, he was obliged to postpone an operation which was subsequently performed without anæsthesia.

In March, 1849, we were near losing a patient, from the unskillful management of chloroform by a non-professional bystander; and not long after, we tried the mixture of chloroform and ether, and have used no other anæsthetic agent since, under the opinion that the ether sustains the vital powers against the purely sedative effect of the chloroform. Experience has taught us, however, that there is liability to accident from its use.

I am constrained to believe, that a frank avowal of the profession would create astonishment at the great number of non-fatal accidents that have occurred, and that the details would aid in the establishment of principles for conduct in its administration, and serve to throw around the sale and use of anæsthetic agents, such guards as would protect the community from their direful effects. Even in Edinburg, where it is claimed, that in a hundred thousand cases where chloroform has been used, not a single accident has occurred; *untoward symptoms have compelled the suspension of the use of the article,* (as I was informed by an assistant of Dr. Simpson,) which the operators profess to be able to trace to the *impurity* of the agent employed.

My attention has just been called to the researches of Prof. Horsford, Cambridge, Ms., (*Bost. Med. and Surg. Joarnal, Oct.* 19,) and to a paper in the *Am. Journal of Medical Science* for Oct., from Dr. Bickersteth, of Liverpool, to which I refer as corroborative of the positions herein assumed, viz:

First. That accidents from anæsthesia are generally attributable to idiosyncracies in the subjects.

Second. That derangements of the circulation depend upon the disturbance of the function of respiration.

Third. That artificial respiration is the most valuable of all means for counteracting dangerous symptoms.

October 25, 1853.—*Western Lancet.*

OBSERVATIONS ON NON-RECURRENCE OF SECONDARY ATTACKS OF DYSENTERY.

BY AUSTIN FLINT, M. D.

In a clinical report on Dysentery, based on an analysis of forty-nine cases in the course of publication in the Buffalo Medical Journal, Prof. Flint has a section devoted to observations on the "recurrence of the disease," which we copy entire.

The subjects of this section are interesting, and so far as I know have not been investigated by means of recorded facts. What remote effects, if any, in the organism, follow an attack of dysentery? Does it beget a predisposition to any other disease? Does it impair the constitutional vigor? Is the patient afterwards liable to renewed attacks of the disease, or is the susceptibility to the action of the cause, or causes, lessened, or destroyed, so that the morbid processes having once taken place, there is greater security, if not entire exemption thereafter? These are questions interesting in themselves and important in their pathological bearings. The facts in this collection of cases pertaining to these subjects are not numerous, but, few as they are, they lead to the belief that they involve something more than coincidences; that they point to laws of the disease which do not appear, as yet, to have received attention. I will proceed to present the results developed by the analysis.

Of the thirty-eight cases ending in recovery, in sixteen, the patients either continued under observation, or definite information was obtained respecting their subsequent health for periods varying from one year to thirteen years. To be more precise with regard to these periods, the duration of the subsequent history in the cases respectively are as follows: thirteen years, one case; seven years, two cases; five years, two cases; four years, nine cases; two years, one case; and one year, one case. In all, sixteen cases. Of these sixteen patients only one has died. The patient died with tuberculosis of the lungs, four years after recovering from dysentery. Of the remaining fifteen cases, in all, the health has been good during the periods respectively during which the patients remained under observation, or within knowledge. I mean by this, that not one has suffered from any other important disease, and in nearly every instance there has been excellent health.

Not one of these fifteen patients had experienced a second attack of dysentery. The result is rendered somewhat more striking by the fact that, exclusive of the case in which the date of the disease was but a year since, all the patients have been for several years past within the sphere of an epidemic influence, the disease, as already stated, having prevailed more or less, as an epidemic in this city, in the autumnal months for the last four years. I can also call to mind several cases of dysentery occurring at least four years since, the histories of which were not taken, the patients, in the meantime, being under observation. In none of these instances has the disease been twice experienced. *I have not yet met with a second attack of dysentery.* It is worthy of notice that three of the cases in this collection occurred in one family at different dates, viz: one case, thirteen years ago; one four years, and one two years. In these instances new subjects were attacked, they escaping who had previously had the disease.

It would seem, from these facts, that an attack of dysentery does not exert an unfavorable influence on the organism, that patients are not rendered thereby prone to any particular disease, but, on the other hand, enjoy good health. It would also seem that patients are not liable to a repetition of the disease.

I would not be understood as presenting these inferences in the light of established truths. The number of observations is too small to warrant deductions which shall represent fixed laws of the disease. But, as already remarked, it is difficult to account for the facts on the hypothesis of their being due to mere coincidence; and I repeat that the facts point to existence of laws which remain to be settled by further investigation. We are at least justified in concluding, from the data before us, that deterioration of the health subsequent to dysentery is not the general rule, and that an attack does not lead to any increased susceptibility to the cause or causes of the disease.—*N. Y. Journal.*

THE TABLE–TURNING DELUSION.

THE following is from Professor Faraday, of the Royal Institution:

To the Editor of the London Times:

"SIR:—I have recently been engaged in the investigation of table-turning. I should be sorry that you should suppose I thought this necessary on my own account, for my conclusion respecting its nature was soon arrived at, and is not changed; but I have been so often misquoted, and applications to me for an opinion are so numerous, that I hoped, if I enabled myself by experiment to give a strong one, you would consent to convey it to all persons interested in the matter. The effect produced by the table-turners has been referred to electricity, to magnetism, to attraction, to some unknown or hitherto unrecognized physical power able to affect inanimate bodies, —to the revolution of the earth, and even to diabolical or supernatural agency. The natural philosopher can investigate all these supposed causes but the last; that must, to him, be too much connected with credulity or superstition to require any attention on his part.

"Believing that the first cause assigned—namely, a *quasi* involuntary muscular action (for the effect is with many subject to the wish or will)—was the true cause, the first point was to prevent the mind of the turner having an undue influence over the effects produced in relation to the nature of the substances employed. A bundle of plates consisting of sand-paper, mill-board, glue, glass, plastic, clay, tinfoil, card-board, gutta percha, vulcanized caoutchouc, wood, and resinous cement, was therefore made up and tied together, and being placed upon a table under the hand of a turner, did not prevent the transmission of the power; the table turned or moved exactly as if the bundle had been away, to the full satisfaction of all present. The experiment was repeated, with various substances and persons, and at various times with constant success; and henceforth no objection could be taken to the use of these substances in the construction of apparatus. The next point was to determine the place and source of motion; i. e., whether the table moved the hand, or the hand moved the table; and for this purpose indicators were constructed. One of these consisted of a light lever, having its fulcrum on the table, its short arm attached to a pin fixed on a card-board, which could slip on the surface of the table, and its long arm projceting as an index of motion. It is evident that if the experimenter willed the table to move toward the left, and it did so move *before* the hands, placed at the time on the card-board, then the index would move to the left also, the fulcrum going with the table. If the hands involuntarily moved towards the left *without* the table, the index would go towards the right; and if neither table nor hands moved, the index would itself remain immovable. The result was that when the parties saw the index it remained very steady; when it was hidden from them, or they looked away from it, it wavered about, though they believed that they always pressed directly downwards; and when the table did not move, there was still a resultant of hand force in the direction in which it was wished the table should move, which, however, was exercised quite unwittingly by the party operating. This resultant it is, which, in the course of the waiting time, while the fingers and hands become stiff, numb, and insensible by continued pressure, grows up to an amount sufficient to move the table or the substances pressed upon. But the most valuable effect of this test-apparatus (which was afterwards made more perfect and independent of the table,) is the corrective power it possesses over the mind of the table-turner. As soon as the index is placed before the most earnest, and they perceive—as in my presence they have always done—that it tells truly whether they are pressing downwards only or obliquely, then all effects of table-turning cease, even though the parties persevere, errnestly desiring motion, till they become weary and worn out. No prompting or checking of the hands is needed — *the power is gone*; and this only because the parties are made conscious of what they are really doing mechanically, and so are unable unwittingly to deceive themselves. I know that some may say that it is the card-board next the fingers which moves first, and that *it* both drags the table and also the table-turner with it. All I have to reply is, that the card-board may in practice be reduced to a thin sheet of paper weighing only a few grains, or to a piece of goldbeaters' skin, or even the end of the lever, and (in principle,) to the very cuticle of the fingers itself. Then the results that follow are too absurd to be admitted: the table becomes an incumbrance, and a person holding out the fingers in the air, either naked or tipped with goldbeaters' skin or card-board ought to be drawn about the room, etc.; but I refrain from considering imaginary yet consequent results which have nothing philosophical or real in them. I have been happy thus far in meeting with the most honorable and candid though most sanguine persons, and I believe the mental check which I propose will be available in the hands of all who desire truly to investigate the philosophy of the subject, and, being content to resign expectation, wish only to be led by the facts and the truth of nature. As I am unable, even at present, to answer all the letters that come to me regarding this matter, perhaps you will allow me to prevent any increase by saying that my apparatus may be seen at the shop of the philosophical instrument maker—Newman, 122 Regent-street.

"Permit me to say, before concluding, that I have been greatly startled by the revelation which this purely physical subject has made on the condition of the public mind. No doubt there are many persons who have formed a right judgment or used a cautious reserve, for I know several such, and public communications have shown it to be so; but their number is almost as nothing to the great body who have believed and borne testimony, as I think, in the cause of error. I do not here refer to the distinction of those who agree with me and those who differ. By the great body, I mean such as reject all consideration of the equality of cause and effect; who refer the results to electricity and magnetism—yet know nothing of the laws of these forces; or to attraction—yet show no phenomena of pure attractive power; or to the rotation of the earth, as if the earth revolved round the leg of a table; or to some unrecognized physical force, without inquiring whether the known forces are not sufficient; or who even refer them to diabolical or supernatural agency, rather than suspend their judgment, or acknowledge to themselves that they are not learned enough in these matters to decide on the nature of the action. I think the system of education that could leave the mental condition of the public body in the state in which this subject has found it must have been greatly deficient in some very important principle.

I am, sir, your very obedient servant,

Royal Institution, June 28, 1853. M. FARADAY.

A VALUABLE SUBSTITUTE FOR ERGOT.

BY DR. B. H. WASHINGTON, OF WOODBURN, KENTUCKY.

Dr. Washington has recently discovered that dry cupping, applied to the spinal origin of nerves, has the effect of stimulating the function of the organ to which the nerves are distributed. Applied to the lowest part of the sacrum, dilatation of the os uteri is produced; and applied higher up, contraction of the uterus follows.

In an obstetrical case, where the pains had endured fourteen hours without producing any perceptible effect, in consequence of rigidity of the os uteri, Dr. Washington applied a dry-cup as low down on the sacrum as possible, so as to cover the origin of the nerves to the os uteri. The result was most satisfactory, for complete relaxation ensued; at the next pain the head descended to the outlet, and at the second pain the patient was safely delivered, and that in less than ten minutes from the application of the cups. In tedious labor, the cup should be applied, first, to the lowest point of the sacrum, and if, in the course of ten or fifteen minutes, the patient is not delivered, another should be applied higher up, so as to cause the uterus to contract. The lower one should always be on when the upper one is applied, so as to insure relaxation of the os uteri when the pains come on.

In cases of retained placenta, a contrary course is recommended; the cups are to be applied higher up, so as to cause the uterus to contract at once, the relaxation of the os uteri being always sufficient after the fœtus has passed.

The great advantage of this method of causing the os uteri to relax, and the uterus to contract, over the plan of giving ergot, needs no other recommendation than a simple statement of facts. When ergot is ministered, the woman is delivered by main force, in opposition to the proceedings of nature, without any relaxation except that produced by the most fearful pains. By dry cupping such a complete relaxation is produced, that two or three pains are sufficient, and the amount of suffering is not more than ordinary. — *Nashville Journal Med. and Surg.*

Infusum Juniperi Compositum. Mr. Proctor says: "Having had occasion to prepare a variety of diuretics, for a member of my family affected with valvular disease, attended by dropsical effusion into the pleura and pericardium, none of them proved so successful as the infusion of juniper berries with cream of tartar. The necessity of making the infusion every day, led to the adoption of the following formula, which was afterwards used with much satisfaction.

Take of juniper berries thoroughly bruised, four ounces;
" Holland gin, four fluid ounces;
" boiling water, twelve fluid ounces.

Pour the boiling water over the bruised juniper, add the gin, mix them, and let them macerate for twelve hours. The whole should then be thrown on a cotton cloth and expressed, and sufficient water added to the dregs and pressed out to make the infusion measure a pint.

The preparation thus made has an opaque brown color, and a decided odor and taste of the berries. When desirable, it may be made more active by rubbing one dracham of the oil of juniper with the bruised berries, then pouring the gin upon them, and after macerating an hour, adding the boiling water, and continuing the maceration for eight or ten hours longer. The liquid is then separated by expression as above. When made by the last method, the infusion contains more of the oleo-resin of juniper in suspension, and is much less agreeable to the taste, but is more active and efficient. When the patient is troubled with gastric irritability, the first infusion is more appropriate. Whichever may be employed, the dose is from a table spoonful to a wine glass full, mixed with a teaspoonful or more of cream of tartar, three times a day regularly. It is much better, in prescribing juniper berries and cream of tartar for a patient, to direct the salt to be kept separate from the berries, and administered by measured doses with the infusion after it is made; because, when they are infused together, a large portion of the biturtrate crystalizes among the juniper dregs as the infusion cools, and is lost by straining the infusion.—*American Journal of Pharmacy.*

EXTRACT OF CAPSICUM.—*By W. C. Bakes.*—At the request of a physician of this city, I have been induced to prepare the above extract. Although the Pharmacopœia recognizes the Infusum Capsici, and also the Tinctura Capsici, yet it is not always convenient to administer a medicine in the form of a liquid; therefore an extract was thought of, as being perhaps the most convenient to the medical profession. After some experiments, I have found the following formula the most satisfactory:

Take of Powdered Capsicum	8 ounces.
Dilute Alcohol	1½ pint.

Moisten the capsicum with a sufficient quantity of the dilute alcohol, and set the mixture aside in a close vessel, to macerate, for six days; then place it in a percolator and pour dilute alcohol on it until four pints have been obtained; and evaporate by means of a water bath to the consistence of an extract. It is very powerful, and when a small quantity has been placed on the tongue, it produces an insupportable burning sensation immediately; and, if left too long, will act as an epispastic. It has been used with success combined with quinine, in cases of intermittent fever, occasioned by the too frequent use of ardent spirits. An ointment made in the following manner: Take of Extract Capiscum, ʒj; Simple Crate, ℥j; was found to act as a rubefacient in less than twenty minutes. It may be used with success where a simple rubefacient is required.—*American Journal of Pharmacy.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, FEBRUARY, 1854.

Clerical Influence. In these latter days when too many (we fear a majority) of the clerical profession are disposed to meddle with the medical treatment of their parishioners when suffering from disease, and to use the influence of their profession in an unwarrantable manner for or against particular physicians; when, too many in their zeal for what they call reform, (often only another name for change,) plunge headlong into the support of the most absurd, unreasonable, and fanatical modes of treating the sick; when *Homœopathy*, *Motoropathy*, *Hydropathy*, *Thomsonism*, *Mesmerism* and *Spirit-rappingism* has its most active, noisy, and influential supporters and advocates among ministers of the Christian Religion; it is encouraging to find one who, having sufficient common sense to see the difference between Science, in its quiet and unobtrusive round of duty, and Humbug, in its glaring and importunate appeals to the follies and prejudices of weak minds, has also the moral courage to stand forth before the world and fearlessly manifest his preference for sober truth and his reasons "for the faith which is in him."

We have the highest respect for those clergymen who have manfully resisted the temptations every where thrown before them to aid the various forms of quackery in medicine,—on the other hand we have a mingled feeling of contempt and pity for those who have prostituted what should be a holy office to the degraded condition of paid agents and abettors of the hydra-headed monster, quackery.

The foregoing reflections were induced by reading in the Portsmouth "Chronicle" an article in relation to the mortality of the town of Hampton, in this State, from the pen of Rev. Mr. Hartwell, of the Methodist E. Church in that ancient town.

Did our limits allow, we would gladly copy the article of Mr. H. entire. He gives first the bill of mortality for 1853,—being one death in 35$\frac{1}{5}$ of the inhabitants, an unusual mortality for that town;—he also gives an abstract of the per centage of deaths for the last 120 years;—but the best of the whole is the following, which we consider a truth, the acknowledgment of which reflects credit upon its author.

"Another fact appears in examining the records of the town, that the average of life has been much lengthened in the period of 120 years. Diseases were once less complicated and severe than now, much less of sickness in proportion to the whole number of inhabitants, and any thing like a contagion or epidemic rarely known. When these did occur, as in 1734 and 1754, a large proportion of all attacked with the throat distemper, died; and those who died of the epidemic constituted nearly all who died in 1734, there being 60 deaths by this disease, and 8 deaths by all other diseases. In 1754, in 51 deaths, 37 died of throat distemper, and 14 by all other diseases; showing that in the latter period this disease was better managed on the part of medical attendants than in the first instance. Taking the record of the town, and the testimony of several of the most aged persons, it is very evident that there is much more sickness in proportion, and that too with complicated and dangerous maladies, and still many less in proportion die!—showing conclusively that life is being lengthened, and that medical science is on the advance, and on the part of medical attendants there is much more ability to "grapple with fell disease and conquer!" This, then, should call for grateful acknowledgments to our doctors' skill, induce us to put ourselves promptly under their care, and award them the credit of giving us, by God's blessing, a few more years in which to do and enjoy good. And whatever credit, in view of these facts, comes to the doctor, comes to the regular or Aleopathic course of treatment, for quackery of any sort in medicine has but little prevailed here, and in most instances where quacks and uneducated men have been employed, the diseases they have been called to treat have proved fatal in their hands. We, then, are in duty bound to rally round a legitimate and time-honored profession, and ever accord to it the credit which is due."

Schnapps. Although not always flattering to our pride, 'tis well we should be reminded of our inadvertancies, and brought to see ourselves as others see us." Within the last six weeks we have received from the same source through different channels, three copies of a pamphlet entitled "Proofs and Evidences of the Purity and Medical Properties of Wolfe's Scheidam Aromatic Schnapps." Such pertinacity merits attention. In common with most of the profession, we received from the same source some year or two ago the liberal offer of a bottle of this medicine. Not wishing to incur any pecuniary obligations of this sort, we neglected to avail ourselves of the proprietor's generosity; but in this edition of "Proofs and Evidences" we see recorded the names of many of our friends who it seems were unable to withstand the too strong temptation of a pint of gin "*free gratis for nothing, and a bottle thrown in.*" They have not only got the gin, but this magnanimous rumseller has conferred upon them both honor and celebrity. They have the *honor* of seeing their names in print, and they are already *celebrated* so far as the "Proofs and Evidences" are distributed, which would seem to be pretty extensively; and their names will go down to posterity along with that of "Udolpho Wolfe," as the fortunate recipients of "*a pint of* SCHNAPPS."

We copy from exchanges received since the above was written the following opinions of our editorial brethren:

"WOLFE'S SCHEIDAM AROMATIC SCHNAPPS. Shame on the medical men who have allowed their names to be used in aid of this bare-faced piece of quackery. The pamphlet before us contains the names of those among our personal friends and acquaintances of whom we expected better things. When *we* want to get drunk on Holland gin, we will not ask the scientific opinion of medical men as to the "purity and medical properties" of any article."—*Phila. Med. and Surg. Journal.*

One of the editors of the "Kentucky Medical Recorder" closes his notice of the "Schnapps" as follows:

"We keep a bottle of it constantly on hand for our own use, not that we have any disease actually requiring its exhibition, *but we find it a most agreeable remedy, especially if mixed with a little sugar and water.*"

The best view of the case we have seen is the following from the "New-Jersey Medical Reporter" of January:

"SCHEIDAM SCHNAPPS. There is an article going the rounds now-a-days, named as above, that is attracting a good deal of notice; and lest we should be considered 'out of time,' if we did not call attention to it, we offer our friends the following suggestions. It seems to be a remarkable discovery that one Wolfe has made, in these times of Maine Law effort, and progress, even a pleasant alcoholic liquor, that may be used as a beverage without injury, and as a medicine, with wonderful success. It is said not to 'fire the brain,' or 'fur the tongue,' but being 'satisfying' and healthful,' preserves the consumer from 'that fierce desire for stimulants, begotten and perpetuated by the use of adulterated spirits.' And it is not only offered as a 'specific' in many painful diseases, but it is said of it, that '*whenever and wherever it is requisite to administer spirituous liquors for any purpose, this is the liquor that should be administered.*' Wonderful discovery!—Immortal discoverer! But with this new born empiric, and his notable cure-all, and health preserver, we are not a little surprised to find associated, the names of a number of physicians. Before us is a pamphlet, setting forth the proofs and evidences of the purity and 'medical properties' of this *innocent alcoholic beverage, and specific for disease*, and a number of pages are devoted to what are called certificates of physicians approving its use; but upon examining these credentials, we find but few of them that are really recommendatory. These medical gentlemen have either been supplied with the 'Schnapps,' or asked by note or circular to accept of it, and they have replied as in the following extracts, which are selected for their brevity, though given in full, as they appear in the pamphlet.

'I am aware of the medicinal properties of pure Holland Gin.'

'If it answers my expectations, I will be happy to prescribe it for my patients, in dropsical and nephritic cases.'

'I would frequently prescribe Gin for my patients, if I knew where I could get that which is fit for medicine."

'That a pure article for medicinal purposes is very much needed, I fully agree with you.'

Such is the character of the *recommendations*, as they are called. There is scarcely an instance mentioned in which it has been used, and its value certified to, and yet these medical gentlemen have allowed themselves unwittingly to be brought before the public, by such a man, who has taken advantage of their civility, in respectfully replying to his applications, as co-workers with himself in the sale of his liquor. Physicians cannot be too careful to avoid these designing persons; for often by them, as Tupper has it—'the light of a thoughtful spirit is quenched beneath the bushel of commerce;' and they rejoice when they can ensnare honest and fair dealing men in the traps their own cunning has set. And then, if the beguiled, finding themselves cheated, expostulate and resist, like the Ephesian silversmith, who made shrines for the goddess Diana, they may turn with scornful laugh, and say triumphantly in the midst of their growing possessions,—'Sirs, ye know that by this craft, we have our wealth.' And truly in this, is the main-spring of their conduct. May we not say to our brethren, in the language of the sainted physician, Luke,—'Take heed, and beware of covetousness.' These empirics are covetousness personified."

GALVANISM:—*Its Application as a Remedial Agent.* *By* C. H. CLEAVELAND, M. D., *pp.* 96.

This is a "hand-book," or compendium of the opinions of a large number of Physicians as to the value of Galvanism as a remedy for many chronic and some acute diseases. Its more direct object is perhaps to introduce to the profession the "Galvanic Supporter," in the manufacture and sale of which its author is interested.

While an acknowledged selfish object may with some detract from the confidence with which they would otherwise read this book, we are inclined to look with favor upon the course pursued by Dr. Cleaveland in introducing to the medical profession what he and others believe to be a valuable apparatus. He intends to confine the instrument entirely to the use of physicians, thus avoiding the speculative charlatanry which has been displayed in the sale of other supporters.

Knowing Dr. C. personally, that he is a high-minded and well educated physician, and that he has the good of the profession at heart, we have confidence in his acts and motives, and would bespeak for him and his instrument the careful consideration of all educated physicians.

As this instrument has been before the profession but a short time, its use is quite limited. Some physicians of our acquaintance have been pleased with its effects and unhesitatingly recommend it.

We have not used it sufficiently to state our results with that definiteness we should wish, but will in some subsequent number report in full the success attending its use in our hands.

The following communication relative to this apparatus was received from a new subscriber, too late for insertion in the usual place, but is perhaps as properly introduced here as elsewhere.

Mr. Editor:—I wish briefly to call the attention of the profession to "*Seymour's Galvanic Abdominal Supporter*," for uterine diseases; an instrument which has been before the public but a short time, but will I think be found very useful for the relief and frequently the cure of many diseases affecting the reproductive organs in females, such as Lencorrhœa, Dysmenorrhœa, &c., which are always so troublesome, and in many cases entirely baffle the usual treatment prescribed by our best physicians.

When my attention was first called to this instrument, my prejudices were decidedly against the use of mechanical applications in the cases above mentioned; when I say *mechanical*, I mean that *alone*, as I have made use of various Abdominal and Spino-Abdominal Supporters, with, to say the least, very equivocal benefit. But on investigating the agency which is brought to bear in combination with the mechanical support of this instrument, I was induced to make trial of it in several cases I then had under treatment, and I must say with signally beneficial results to my patients.

One case may be mentioned. Mrs. D., aged 40, had been afflicted for the last 6 years with Leucorrhœa of an inveterate character, a large portion of the time being unable to attend to her household duties. Her case had been treated by a multiplicity of physicians, both regular and irregular, without any permanent relief, but gradually getting worse. I advised her to try one of these instruments, which was immediately applied, and after wearing it two weeks she was much relieved, and at the end of two months was nearly well of her diffculty, and now, four months since, entirely cured. She has fleshed up and looks as well as the healthiest woman in the neighborhood. I should mention that with the exception of an occasional astringent vaginal injection, no other means were used, if we except rest and quiet on her part.

I have used them in several other cases, and in nearly every instance with marked benefit to the patient. My object in this communication is to induce the profession to make trial of this (to my mind) valuable instrument, as almost all practitioners have more or less of these troublesome and vexatious cases to treat, and too often leaves his patient in as bad if not worse condition than he finds her. If Seymour's Supporter has merit, let it be known; if not, throw it aside; either can only be known by testing in a sufficiently large number of cases. Truly yours, C. K. K.

This book can be obtained by remitting 25 cents to "H. Seymour & Co., Seneca Falls, Seneca Co., N. Y.

Dr. Cleaveland is engaged in investigations and experiments in relation to the therapeutic value of Galvanism as applicable to any part of the system, and for any diseases. Any facts or the results of any experiments in this direction will be gladly received if directed to Dr. C., care of Seymour & Co., as above.

"American Medical Monthly." This is the title of a new medical journal, the first number of which was issued Jan. 1st, from the press of Geo. P. Putnam & Co., N. Y. It is conducted by the Faculty of the New-York Medical College, and edited by Edward H. Parker, M. D., late editor of this journal. This first number looks well, and is filled with valuable matter. We congratulate our friend Parker on the favorable circumstances under which he again appears in the field of medical literature, and prophecy for him an abundant success. The "Monthly" is to contain 80 or more pages, and will be furnished at three dollars a year. As it will be national in its character, we can recommend it to our readers as well worthy their attention.

Medical School of Maine. The medical lectures will commence at this institution on the 15th day of February. Although not among the *noisy* schools, this has always maintained a good reputation, by having efficient teachers, in which respect it is behind no school in this country.

☞ To Readers and Correspondents. All communications concerning the Journal, of whatever character, should be addressed to the editor.

Books for notice, and other articles of bulk, may be sent by express to the "Care of G. P. Lyon, Concord." Communications, remittances, &c., by *mail*, will be best directed to the editor, at East-Washington.

Professor P.'s article on "Table Tipping" will appear in our next, as will the communications of Dr. F. They were all received too late for this number.

THE

NEW-HAMPSHIRE

JOURNAL OF MEDICINE.

VOL. IV. MARCH, 1854. No. 3.

[For the N. H. Journal of Medicine.]

"TABLE TIPPING."

Mr. EDITOR :—Perhaps the readers of the Journal may like to know something more than the newspapers contain, respecting the "table turning" and "tipping," in regard to which so many in this great city are just now getting crazy. If so, the following results of two hours' observation and experimentation in this department of humbuggery may not prove uninteresting.

It has been demonstrated by Prof. Faraday, of London, that "table turning," and "table sliding," and other forms of locomotion performed by this useful article of household arrangements, is produced by the muscular efforts of those whose hands are applied to the table. It is nevertheless conceded that this is often, and *may*, in every case, be an *involuntary* effort; and therefore the performers themselves may be entirely unconscious of it, and consequently may sincerely (though falsely) deny that any such effort is made. Physiologists are perfectly familiar with a large class of analogous facts; but I at this time speak particularly of another phase of so-called spiritual manifestations—"table tipping"—a thing very different both in its objects and its mechanism from the movements just mentioned.

At the solicitation of a friend who had recently obtained some rather striking spiritual communications, and who would like some assistance in detecting the imposition, I was recently induced to devote a session of about two hours to this matter,—and the following are some of the particulars observed during the same.

On entering the room, at 3, P. M., nine persons were found sitting around a black walnut table, about four feet long by two and a half wide, each having the palm of one hand in contact with the table. The operator also, (otherwise called the *medium,*) was sitting with both palms upon its upper surface. Four or five other persons were also standing or sitting near the table. As we entered, (three of us,) we sat for a time at some distance from the table, and observed in silence. The operator was a pale, slender man, of perhaps 38 years, with a cool and subdued expression, but not wanting in quickness and intelligence, as his glance at each person on entering indicated. It is perhaps enough to say of the company present, that the individuals, with two or three exceptions, did not appear to me to belong to the class of people *difficult to be humbugged.* To these exceptions I shall again allude. There was but a single female present, and she was not yet in the "circle," —i. e. not of those around the table, with palms thereon.

I had barely time to make these observations before, in reply to a question put by one in the circle, the table rose on one side about three inches, and fell back again immediately. This was repeated three times, and interpreted to mean "yes." A single movement means "no," and two rappings or "tippings," "not yet," or "doubtful." You may get an idea of the rapidity of the succession of the tipping, when I say that usually they corresponded to my own pulse, and which I found to be 65 per minute. This, by the way, may perhaps indicate that I "kept cool" enough to be able to see and interpret phenomena as they actually occurred. A succession of numerous tips at any time, indicated, I should add, that the spirit wished to spell out something to the medium, or operator, as he called over the letters of the alphabet. The table would at times rise higher, and then of course the raps by the legs on the carpet would be both slower and louder.

The operator was also a "writing medium," so called. That is, he would now and then be apparently seized with violent contractions of the deltoid and other muscles above the elbow, which passed gradually down to the wrist and hand,—when he would seize a pencil, and after sundry vain attempts to bring it to the paper, would at last succeed in writing a scrawl which *nobody but himself could read;* and whenever *proper names* occurred even, he generally could not be certain what they were, without some help from the person in the circle for whom he was operating. This was an observation to which I attached some importance.

Several questions had been asked by those in the circle, but unfortunately they were all unsatisfactory for the first half hour. At this moment a well dressed lady entered, with a bold and peculiar air, and took her seat in the circle. She, however, could get no satisfactory answers, and at last my friend also entered the ring.

He was assured at once, in reply to a question, that the spirit of his father would communicate with him; but he in his turn failed to get any thing more.

He then inquired of the said spirit, "What is the cause of all this confusion at this time?" The table at once began to call for the alphabet in the most energetic manner, and spelt off the following reply: "My dear son, I cannot penetrate this the scepticism of the professor!!" My friend, being somewhat amused, involuntarily cast a glance at me, and instantly all eyes were turned upon me as the offending and the offensive one. I expected the next moment the spirit—I meant to say the *table*—would command me to leave the room. I resolved, however, to wait for a positive request to leave, and waited for some thing a little more definite to turn up. Having been subjected to the impudent stares of the circle, and especially of the *woman* before alluded to, by subsequent false answers, it was at last proposed that the spirit should indicate who it was that was so objectionable. I thought it very likely that by this time the table would decide that I was the unlucky "sceptical professor" meant.

But no such thing!! One after another in the circle asked, "Is it I?" and got a negative reply, till the turn came to one of the shrewd-looking men before mentioned, who was told he was the man. My friend then inquired—"Is there any other person here present, to whom your former terms will apply?" and was answered "No."

The woman and the rest now looked a broadside of impudent indignation at the person just alluded to, when he said he was a sceptic, though he did *not* say he was a "Professor;" and very soon he left both the table and the room.

The table having decided that I was *not* the "sceptical professor," I now took my seat in the ring, and was told that a spirit was ready to communicate with me.

"Will the spirit spell its name?"

"Parkman."

"What is your first name?"

"My friend, I am the spirit of William."

"Have you ever been acquainted with me?"

"Yes."

"In what place?"

"St. Petersburg."

Here I may remark that I never knew a person of the name of Wm. Parkman; and when I asked my last question, the operator suggested I should write the names of "several places *where I had been*, as Philadelphia, New-York, &c." I did write one or two of these, and several names of places where I had *never* been. The table selected St. Petersburg,—one of the latter places.

All this having been said at the time in answer to rather anxious inquiries by those in the circle, and by the operator, I then got the following *modified* reponse.

"I knew you by reputation." (Regarding this as very flattering and complimentary on the part of Mr. Parkman,) I then inquired:

"Did you also know me personally?"

"Yes."

"How long since?"

"Between three and four years."

"Where are you located now?"

"I am in a state that you can have more knowledge of if you study nature's laws and comprehend."

"Where did you live?"

"In Boston."

"Can you tell me the street?"

"No."

All these answers were given very promptly by Mr. Parkman, and without any complaint of scepticism, or any thing wrong on my part, or any where else. Not, however, attahing any very high value to his communications, I next inquired:

"Will the spirit of my mother communicate with me?"

"Yes."

"Please give me your name, that I may be assured there is no mistake."

"Mary."

The operator suggested that I should write several names, my mother's among the rest, on slips of paper, roll them up, and lying them upon the table, let the spirit select the actual name when I took it up from the table.

I did so; and the table having indicated the paper on which was my mother's name, I then requested that the name on the paper be also *spelt* before I opened it.

The table spelt "Mary."

I opened the paper, and the name thereon was "Lucy."

My mother's name is "Abby."

It was suggested that this be tried again, and it was so. The table again spelt "Mary," and on opening the paper it read "Sarah."

The operator did not at all understand this. Another shrewd-looking fellow, however, who had been very prompt and useful during the whole performance in helping the spirits out of hard spots, suggested that "as L is next M in the alphabet, the operator might have made a mistake, saying M when it should have been L." This was thought, however, a not very weighty reason for mistaking the whole word Mary for Lucy; nor of selecting either of them for Abby, the name of my mother.

The operator now inquired whether my mother were not living? "You should have asked her spirit that question, but not me, as that ought to have been known by her all the time. But I will ask—'Is my mother still living?'"

"Yes."

"Is she in good health?"

"Yes."

Now, it will be seen that every thing which can be regarded as a test, signally failed in all these trials. The only answer I had reason to believe to be correct, was that my mother is still living. Every body will, however, see that the chances are *equal* of giving a correct answer to both of the last questions; since she must have been either living or *not* living, well or unwell. I have reason to believe she is not in good health at this time; but have not thought it of sufficient importance, so far as completing this report is concerned, to inquire by mail whether she is so or not.

An interesting question, however, occurs here. This was the spirit, it was averred, of my mother; and which conversed with me a while, and then stated that she is now living and in good health. She resides about 250 miles distant from this city, and the supposed conversation occurred between 4½ and 5 o'clock, P. M. Did her spirit entirely leave the body for one half hour at that time? If so, her friends around her would probably have noticed some very striking change at that time. Or did only a part of it come to New-York, and getting under that table, lift it to assure me that her name is Lucy, and Sarah,—and that it is *spelt* "Mary?" I must assert, in the first place, that she is altogether too dignified a lady to engage in such pranks, and at her time of life; and, moreover, that if she *did* do it with a *part* of the spirit, (the rest remaining connected with the body,) she must herself have been conscious at the time what she was doing in New-York. In the absence of all proof on this point, as I have not time to hear from her and report herewith, let each one adopt the horn of this dilemma which he prefers, or consider the whole matter a humbug.

Nothing more satisfactory than what I have detailed was obtained by any of the circle during the session of two hours. The operator remarked that the "circle seemed to be entirely out of gear this afternoon;" and, as I could distinctly hear a friction sound (as from the motion of a cord over a pulley,) before each movement of the table—I thought the remark literally correct. I would recommend a freer use of sweet oil before the sessions commence in future.

My last remark implies that the table tipping is produced by a *mechanical force*. I cannot say here the force was applied in this case, as I had no opportunities for investigating this point. I do not, however, hesitate to say, that any shrewd man, possessing a moderate acquaintance with mechanics and the application of galvanism, might, with the aid of a well-dressed impudent woman, and three or four smart rascals as "Peter Funks," get up a series of spiritual communications vastly more pointed, intellectual and satisfactory than this.

Some honest people, and others not so, demand that we shall adopt a proposition, unless we can *prove* it is *untrue;* and here we are asked if it is not the fact that *spirits* move the table, how do you account for it?—as if it followed that, if we cannot show that something else in *particular* moves the table, then of course spirits do it. In other words, you may *assume* that any particular power you please to name, moves the table; and if I can show that some other force which I may name, moves it, then it follows that you of course are right, and all others wrong. How philosophical this! A man dies suddenly with symptoms of poisoning. You assume that he was poisoned by strychnia; and if I cannot show that it was arsenic that destroyed him, then it follows that you are right, of course!!—he was poisoned by strychnia, and there is no more to be said!! Indeed? And yet, on opening his stomach the arsenic may be found,—or a third substance neither of us had thought of—to account for his death.

This has always been the logic, however, of the believers in spiritual manifestations, and sceptics have often foolishly assented to it. Sceptics have, therefore, a right to the use of the same principle in their turn by this time, if it is still insisted on; and then the ground stands thus:

"I assume that the table is moved by some application of mechanical force; and unless any body who thinks differently can prove that it is a spiritual force which produced the tippings, I am right in my assumption, and he is wrong."

But it is useless to expect philosophy or logic from those who are led astray by these developments. They will go to Signor Blitz, and see tables move, and believe *him* when he tells them it is all jugglery; they will then go to a medium, and see similar movings or tippings, and also believe him when he asserts that it is all *spiritual* influence!! Signor Blitz, however, does a great many more equally unaccountable things, and gives to spiritual rappings of any kind only a small share of attention, and the credulous looker on does not get his imagination particularly excited in this matter. The medium, on the other hand, attends to spiritual manifestations alone; sits down coolly to the business, takes time, looks solemn, and thus the dupe's reasoning powers are overcome, if naturally much developed, by his excited imagination and feelings.

It is therefore useless to attempt to *reason* one out of his belief in these spiritual manifestations, in the various phases now in vogue. The explanation is, that no one was ever *reasoned into* this belief. I am happy to say, however, that not a single medical man has yet become a dupe to such delusions; and consider it our duty, as a profession, to warn others against this form of humbuggery, which, without any good results, has already driven hundreds to the insane asylums of this country.

Yours truly, E. R. P.

New-York, Jan. 7th, 1854.

[For the N. H. Journal of Medicine.]

POLYPUS AT THE NECK OF THE UTERUS.

BY JOHN S. FERNALD, M. D.

Mrs. B., of good health and strong constitution,—mother of a large family,—married at 16,—now 30, has had invariably speedy labors; was taken with parturient pains in the evening. She immediately called in an ignorant mid-wife, who continued with her all night. In the morning I was requested to see her, and arrived about six o'clock; was informed that she commenced flooding the preceding evening, which had continued all night. The pains had been regular as to intervals, but of very little efficacy. An examination found the os uteri somewhat dilated; the flooding free and unremitting; the presentation could not be satisfactorily ascertained. From the anterior lip of the os uteri there depended a substance about half an inch in thickness, and one and a half inches in width, attached by a neck three inches in length. The whole anterior lip was of a hardness approaching schirrosity. With every pain, this substance would present at the os externum. By the frequent exhibition of acet. plumbi and opii, the use of the tampon, with cold applications to the abdomen, the hæmorrhage was somewhat controlled. The rigid state of the os uteri, (and that from disease,) forbade the introduction of the hand to turn; the only alternative was to wait, which I did with great impatience and no little apprehension.

After six hours, the head presented and occupied the cervix, distending the os uteri,—the induration semi-circling the head like a firm band, with no apparent disposition to relax. The pains becoming very strong and expulsive, serious fears were entertained that rupture of the uterus would ensue. When the head occupied the neck and mouth of the uterus, the hæmorrhage completely subsided. As soon as the circumstances would admit, the forceps were applied. After an hour's exertion, with the assistance of the pains, which continued unabated, I had the satisfaction of terminating the labor. The child was still-born. The placenta was discharged without any material aid.

Metrites ensued, although every precaution was taken to prevent; it yielded, however, readily to treatment. The excessive loss of blood during labor forbade active depletory measures; but opium, cal. tart. antimon., with local applications, proved successful. Among the latter I would mention the "Tansy Pancake," of Dewees.

The polypus sloughed during this time and was lost in the discharges, (as the sequel will show.) The patient's recovery was perfect.

Two years subsequently, Mrs. B. was again *enciente.* I apprehended that if the schirrosity of the os uteri had increased, or even had not subsided, the worst consequences would ensue at parturition. I was, however, agreeably disappointed. It was disclosed upon examination that the hardness, although not entirely dissipated, was so far reduced that it offered no impediment to the birth of the child. The subject of the above case has since been the mother of three children, and is in firm health. The polypus grew from the cervix uteri; the hardness was undoubtedly from inflammation without malignant degeneration.

ODONTALGIA—ITS PATHOLOGY AND TREATMENT.

A valuable article by J. P. Togg, M. D., appeared in the *American Journal of Dental Science*, (July, 1853,) under this head, which, in view of its general utility, we are not surprised to see copied entire by some of our medical cotemporaries. Believing an article on this subject needed by the physician as well as dentist, and that the one before us is as appropriate as any to be met with, we present a synopsis of the substance of it—if indeed the substance of a good article of sixteen pages can be condensed in the space of five or six.—We depart from the author's arrangement, in bringing the "Pathology" and "Treatment" of each disease together, regarding it more convenient for reference. His own words are preserved as nearly as possible, but the sign of quotation is employed only when a sentence or passage is given entire. B. W.

To the form of Odontalgia, which is the result of simple exposure and irritation of the dental pulp, may be given the name of *tooth-ache by direct irritation*. It is characterized by quick, darting pain, and by the suddenness of its invasion and subsidence upon the presence or removal of irritants.

Treatment.—Application of narcotics and anæsthetics to deaden sensation: or vehement stimulation of the exposed nerve to exhaust its sensibility, as by the essential oils of cloves, cinnamon, cajeput. Kreosote is both stimulant and anodyne; combined with morphia in a thin paste, it acts well. A thick solution of *gutta percha* in chloroform allays the pain, and forms a coating which shields the nerve for awhile.* Permanent relief is only afforded by extraction of the tooth, or by destruction of the nerve. For the latter, arsenous acid is the most efficient, combined with four parts of morphia to abate the pain. Apply directly to the nerve on a small pellet moistened with kreosote, and covered with a cap [of wax] so as to avoid pressure.* Irritation may run on to

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* A pledget of cotton, saturated with a solution of gum copal in chloroform, answers a similar purpose. W.

Odontitis, or inflammation of the dental pulp. This begins ordinarily with a dull, gnawing uneasiness, (sometimes accompanied by a sensation of heat,) increasing to a severe throbbing pain, the precursor of suppuration. "Should the inflammation not extend beyond the pulp cavity, the pain is not increased by pressure on the tooth, nor is the tooth started from its socket. The application of cold to the tooth is also followed by temporary relief." The intense pain results from the distension of the capillaries of the pulp from the inflammation, and the unyielding nature of the cavity; the increasing engorgement being attended by increased pain, which is not relieved by suppuration, until the fluid gets exit through the fang, or the pulp becomes disorganized—the pus only increases the pressure on the nerves. Excitement of the heart and arteries is also apt to increase the pain. Like other inflammations, it has exacerbations at night, owing partly to the recumbent posture, and also to the warmth of the head imbedded in pillows. The pain is modified by temperament, and by the condition of the tooth. The *acute* form of inflammation of the pulp "extends to every part of the pulp and lining membrane, and terminates usually in suppuration. It is more common before than after exposure of the pulp." The *chronic* form usually results from exposure of the pulp, and is not so painful as the acute; sometimes there is little or even no pain.

The *Treatment* will be, to extract the tooth, to destroy the nerve, or to subdue the inflammation by antiphlogistics—to be determined by the amount of pain, progress of inflammation, condition of the surrounding parts, value of the tooth, &c. If the inflammation has proceeded too far for arrest, or the lining membrane become exposed, and the object is to preserve the tooth, the nerve should at once be destroyed. "If the tooth is not eroded, or if the inflammation is not caused by the direct application of irritants to the exposed pulp, the antiphlogistic treatment may succeed"—leeches to the gums, saline cathartics, and rigid abstinence. When suppuration has occurred—indicated by the tooth appearing longer than the rest, loose, and very sore—the tooth may by drilled (as recommended by Dr. Hullihen) to evacuate the pus.

Peridontitis, or inflammation of the investing membrane of the tooth, is closely allied to the preceding, and may be produced by the same causes. But it is more likely to be metastatic. The pain is first dull, then acute and throbbing. There is soreness and elongation of the tooth, redness and swelling of the gums, and sometimes of the cheek. "In both these forms of odontalgia we may have all the accompaniments of inflammation, such as constipation, headache, dry skin, flushed cheeks, full and rapid pulse; in short inflammatory fever." The *treatment* is very much the same in both.

Fungus of the nerve is a growth in the nerve cavity in which the nerve has suppurated, and probably originates from a remnant of the dental blood vessels. It is of a deep red color, soft, bleeds readily and freely, sometimes insensible, at others highly sensitive. It may be small and deep in the fang, but generally protrudes, filling up the cavity formed by caries.--(Hullihen.)—It must be destroyed by the actual cautery. By bleeding it freely, the pain may be relieved.

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* We generally prefer one part arsenic to two of morphia, using about the 20th of a grain of the compound, and letting it remain in the cavity six or eight hours—re-applying the powder, if necessary. W.

Odontalgia may also proceed from exostosis. Remedy, extraction.

More general causes of *Odontalgia.* Intermediate between the foregoing and the causes now to be considered, is a nervous condition, in which the general sensibility is so exalted that slight causes induce severe pain.

Neuralgic tooth-ache may proceed from any affection capable of producing neuralgia elsewhere. Among the intrinsic affections may be mentioned *neuritis*, or inflammation of the nerve or its neurilemma; engorgement of the vessels of the nerve; venous congestion. Any pressure of the nerve along its course, as from exostosis, aneurism, tumor or foreign body, may produce neuralgic tooth ache. The teeth are often implicated in attacks of facial neuralgia or *tic douloureux*, which may depend upon similar causes. In a case of this disease, the Gasserian ganglion was fibro-cartilaginous, and as large as a nutmeg. Or the disease may depend upon disorder of the encephalon, affecting the fifth nerve at its origin.

This general neuralgia of the face may result from the irritation of a diseased tooth—by *radiation*, or "that power of the nervous centres by which they disperse an impression made at one point over a wide circuit," or by *transference*, by which an impression at one point is felt at a remote one. Thus irritation of a ramuscule of the inferior dental nerve may arouse central disturbance, and be *radiated* over the whole face and head; and, (illustative of the law of transference,) in a case of Mr. Lawrence, "neuralgia of the *thumb* was caused by the pressure of a *pivot tooth on the nerve of an old fang.*"

The teeth may also suffer those strange wandering pains which characterize the masked intermittents of malarious districts. Universal *malaise* generally accompanies the disturbance. "As the disease advances, the periodic element gradually retires, and the neuralgic becomes unduly prominent."

The pain of neuralgic tooth-ache is usually acute, sometimes mild at first, gradual in its increase and decline, usually irregular, (moderate, slow, or darting through the dental arches,) sometimes regularly intermittent. When it occurs in sound teeth it is paroxysmal, is attended with little or no swelling, and occupies a considerable portion of the jaw, "and especially when it alternates or is associated with pain of the same character in other parts of the face, there can be little doubt as to its real nature." (*Wood, Practice of Medicine.*)

The *Treatment* will vary according to the cause. If the disease depend upon exaltation of general sensibility, nervous or vascular derangement, disturbance of the nervous centres, malarious poisoning, etc., it must be combatted by general treatment adapted to the condition of the case. In obstinate cases of local neuralgia, M. Roux recommends, if the inferior nerve be involved, trephining the lower jaw so as to reach the nerve : he then severs it and passes a stick of potassa fusa up and down the canal, so as completely to destroy it. For the superior nerve, an incision is made upon the cheek, and the caustic introduced as deeply as possible along the infra-orbital canal. Local sources of the disease, as pressure on the nerve from tumors, irritation from diseased teeth, &c., must be looked for and the cause removed.

Sympathetic tooth-ache.—"The nervous connections of the teeth are so numerous and so extensive, that we need not be surprised at the wide range of their sympathies. The fifth nerve, supplying the whole face and all the organs of the senses, brings them in relation with the entire head. But besides this, they have special connections with many of the more important organs of the head. Meckel's ganglion and its branches, forming a sort of sympathetic centre for the entire head, is directly connected with the superior maxillary nerve, just as it is about passing into the infra-orbital canal for the supply of the upper teeth. With the ear they are still more intimately connected through the otic ganglion, which rests upon the inferior maxillary nerve, at its exit from the foramen ovale. This union will explain the extreme frequency of ear-ache in children at the period of second dentition, and the tooth-ache which sometimes attends it. The same ganglion, by means of the tympanic plexus which is so directly connected with it, brings them in relation with the glosso-pharyngeal and the pneumo-gastric nerves, and so establishes a sympathy between these organs and the whole upper portion of the alimentary canal, and with the lungs. Through the sympathetic system these connections are indefinitely extended. With the spinal cord they have not only the union, through the origin of the fifth nerve, with the spinal bulb, but also through the numerous filaments of the sympathetic which are connected with the spinal nerves. Thus we find that, through this intricate web of sensory filaments, the teeth are directly or indirectly united with every organ in the system.

"During certain cenditions of the system, therefore, it is not surprising that these sympathies should be roused to undue activity. Many diseases have the power of inordinately exciting nerves remote from the organ affected. The various disturbances of the alimentary canal are remarkable for this peculiarity. The anatomical connection between the stomach and bowels, and the teeth, already glanced at, sufficiently prepares us to expect tooth-ache as an occasional accompaniment of disorder of the apparatus of alimentation.

"*Pregnancy* is another state which is very liable to excite sympathetic tooth-ache. This is indeed but a part of those numerous remote disturbances which are caused by the peculiar condition of the uterus at this interesting period. All the organs of the abdomen are involved in that intricate net of nervous filaments which are ultimately distributed to the uterus. The two great cords of the sympathetic which descend from the solar plexus and semilunar ganglion, on both sides of the aorta, first unite over that vessel in a plexus which weaves into itself all the various threads of which these cords and the stray fibres which surround them are composed. Having thus knit up the life of the whole abdomen in one intricate interlacement of fibrillæ, the nervous mass then divides into its two hypogastric nerves and their plexuses. These proceed directly to the ganglia of the uterus, sending off great numbers of nervous twigs to all the neighboring organs, and wrapping all the pelvic viscera in their labyrinthine threads. In this manner is the great organ of reproduction brought into relation with the entire frame. During pregnancy, as has been clearly demonstrated by Dr. Lee, the nervous system undergoes the same change to which all the other structures of this organ are subjected. They increase in size, and this increase extends even to the cords which descend from the semilunar ganglia. There are, therefore, both anatomical and physiological reasons for the extensive range of sympathies possessed by the pregnant uterus. The close contact of the semilunar ganglion with the stomach, and the relations between that organ and the teeth, explain how these may be involved."

These forms of odontalgia require constitutional treatment, which must be left to the judgment of the practitioner in each individual case.

Rheumatism and *Gout* may also affect the teeth.—Of the latter, an interesting case is recorded by Dr. Harris in his Principles and Practice of Dental Surgery.—The treatment must be directed towards the general disease.—*Southern Journal of Medical and Physical Science.*

CONTRIBUTIONS TO PHARMACY.

By John P. Metauer, M. D., LL. D., *of Virginia, Professor of the Principles and Practice of Medicine and Surgery in the Medical Department of Randolph Macon College.*

It will not be denied that the operation of therapeutical agents is essentially influenced by the mode by which they are prepared.

This fact, so generally true, is particularly exemplified in the preparations of cinchona, cantharides, colchicum, guiacum, and several other medicinal substances, of which I shall speak presently.

For more than twenty-five years my attention has been particularly directed to this subject, and, during this period, I have adopted several new methods of preparing some of the articles of the materia medica, and have satisfied myself, by repeated practical trials, that these preparations possessed superior efficacy to those generally employed.

Many years ago I prepared an acetous infusion of cantharides,* for blistering purposes. This infusion was first designed for vesicating the scalps of infants, without removing the hair; and its action was very satisfactory. It was applied simply by wetting the surface of the head, and the hair nearest its roots, and then carefully covering the parts with a cabbage leaf, or oiled silk, to prevent the too sudden evaporation of the blistering fluid. When other parts of the body were to be blistered, a thin compress of bibulous paper, or cloth saturated with the infusion, was applied to them, and carefully covered with oiled silk. To insure speedy and effective vesication, I usually reäpplied the tincture two or three times, after intervals of half an hour. I found this agent equally as efficient and certain in its action with adults as with infants. It rendered the removal of the hair unnecessary, as it blistered every part of the surface, even when a very thick head of hair existed. This preparation has been used by many of my medical friends, and with entire satisfaction. Within the last ten years I was induced to prepare an œthereous solution of cantharides* as a vesicant, and have found it far more prompt and certain in its operation than the acetous infusion. It may be applied in the same manner as the latter. Frequently, merely wetting the skin with the solution, without covering the part, will blister; especially in infants. When adults are to be blistered, the preparation should generally be applied with a thin compress, and carefully covered, as already suggested—moistening the compress from time to time, until the skin is decidedly reddened. I have found this by far the most convenient and reliable means of blistering that I have ever employed. This œthereal tincture of cantharides is also an efficient internal remedy. As an emmenagogue and diuretic, it has greatly exceeded my expectation. The œthereous menstruum seems not only to promote the operation of the cantharidin upon the genito-urinary organs, but at the same time to guard against strangury. I now use this preparation of cantharides almost exclusively, both externally and internally, when the lytta is indicated, and have done so for seven or eight years.

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*R. Canth. contus., 2½ oz.; Acid acet., 2 pts. Digest for 14 days, and filter.

The remarkable efficacy of the œthereous preparation of the Spanish Fly induced me, five years ago, to employ spirits of nitric œther as a menstruum for cubebs, colchicum, guiacum, squill, ergot, gossypium, sanguinaria, ipecacuanha, digitalis, nux vomica, and some other articles of less importance. The œthereous tincture of cubebs† is a most valuable remedy in all the sub-acute inflammations of the bladder, of the urethra, of the uterine cavity, and of the mucous lining of the stomach and intestines. It should be administered in some mucilaginous vehicle.

The tincture of colchicum‡ is applicable to the treatment of all of the cases demanding the use of the colchicum, and is decidedly preferable to the vinous seminal tincture now in use, by reason of its tendency to act on the urinary system. It is very well adapted to the treatment of sub-acute rheumatism, gout, œdema, and neuralgic rheumatism, especially if the urinary secretion is materially diminished in quantity. In the bloating occasionally connected with the dysmenorrhœa, a combination of this tincture with the œthereous tincture of cantharides, sanguinaria and gum guiacum, will be found a most valuable remedy. It should be taken three or four times daily, in an infusion of pine tops, in doses of ten to twenty drops each. The same combination will also be found¶ valuable in the sub-acute stage of gout and rheumatism.

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*R. Canth. contus., 3 oz.; Spirit. œth. nitric, 2½ pts. Digest for 8 days, and filter.

†R. Pip. cubeb. contus., 4 oz.; Spirit œth. nitric, 2 pts. Digest 8 days, and filter.

‡R. Sem. colchic. contus., 4 oz.; Spirit. œth. nitric, 2 pts. Digest 10 days, and filter.

The œthereous tincture of gum guaicum[*] is superior to the preparations of that article now in general use in the treatment of rheumatism, by reason of its tendency to act on the urinary system; and the same may be said of it as an emmenagogue when there is rheumatic irritation of the uterus as an associate cause of dysmenorrhœa.

The œthereous tincture of squill[†] is adapted to all cases in which squill is indicated, and is an elegant preparation. In dropsy, œdema of the mucus lining of the larynx, and of the lungs, in asthma, and as an expectorant and diuretic, it will be found a most convenient and valuable preparation. A combination of equal parts of this tincture and of the syrup of lobelia inflata, taken three or four times daily, in doses of ʒss. to ʒj. each is the most efficient remedy I have ever used in asthma.

The œthereous tincture of ergot[‡] is best suited to cases of inaction or torpor of the uterus, connected with debility or exhaustion; it may be used either as an emmenagogue or as a parturient. In uterine hæmorrhage, or menorrhagia dependent on debility, or exhaustion of the uterus, it will be found a valuable remedy. Its action upon the uterus is greatly influenced by the œthereous menstrum. It is best to give it in some diuretic vehicle, such as pine tops tea, or flax seed or elm tea; and it may be taken in doses of ʒss. to ʒij., once in four or five hours.

The tincture of gossypium[§] is possessed of properties very similar to that of ergot, and may be employed in like doses with it, and in similar diseases.

The tincture of sanguinaria[¶] is valuable when combined with the tinctures of cantharides, guiacum, colchicum, cubebs, and indeed any other emmenagogue, in the treatment of dysmenorrhœa. It is also a valuable expectorant and diaphoretic in pneumonia, bronchitis, and œdema of the mucous lining of the air passages. It is administered in doses from ʒss. to ʒij., once in three or four hours. This tincture may also be employed alone as a diaphoretic and expectorant.

The œthereous tincture of ipecacuanha[‖] is so closely assimilated to the tincture of the sanguinaria in its therapeutical properties, as to be applicable to the treatment of the same diseases. It is an elegant and most convenient preparation. In typhoid fever it will be found far superior to the ipecac pill as a diaphoretic, especially when the tongue is dry and the thirst urgent. It may be used also in typhus fever, or indeed in any febrile affections during the sub-acute stage. This valuable preparation acts both as a diaphoretic and diuretic in these cases, as well as an expectorant.

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[*] R. Guiac. gum. resin, 4 oz.; Spirit. œth. nitric, 2 pts. Digest 8 days, and decant.

[†] R. Scill. maritim. contus., 4 oz.; Spirit. œth. nitric, 2 pts. Digest 8 days, and filter.

[‡] Ergot. contus., 2 oz.; Spirit. œth. nitric, 1 pt. Digest 10 days, and filter.

[§] R. Gossypii. herbac, 4 z.; Spirit. œth. nitric, 2 pts. Digest for 10 days, and filter.

[¶] R. Sanguinar. canadens. contus, 4 oz.; Spirit. œth. nitric, 2 pts. Digest 8 days, and filter.

[‖] R. Cephæl. ipecac. rad. contus., 2 oz.; Spirit œth. nitric, 2 pts. Digest 8 days, and filter.

The œthereous tincture of digitalis[*] is a far better preparation than the alcoholic, on account of its greater activity; and this it derives chiefly from the œthereous menstruum. In doses from ʒss. to ʒj., in some diuretic infusion, taken three times daily, it will be found well adapted to all such cases as require the foxglove.

The œthereous tincture of nux vomica[†] is especially indicated in the treatment of seminal debility, or, to speak more properly, debility of the generative organs. In this, the gravest of human ills, after such a preliminary treatment as may be demanded for the correction of constipation and prostatic tenderness, this tincture will be found a most excellent means of restoring the erections. It is also valuable in exciting appetite for food, and in the invigoration of the digestive organs. This preparation is well adapted likewise to the treatment of paraplegia, especially when the bladder and rectum are implicated, as well as such other forms of paralysis as demand the nux vomica or its alkaloid. It may be given in doses from ʒss. to ʒiss. three times daily, before or after meals, in some bitter infusion. The cold infusion of wild cherry bark I have generally preferred as the vehicle for it.

The œthereous solutions or tinctures are more readily prepared, requiring to be digested for a less time than the alcoholic, and keep without the least deterioration. They are also adapted to those conditions of the constitution in which alcoholic menstrua would be objectionable.

Hydrargyrum cum creta. This valuable preparation of mercury is usually formed by triturating ℥iij. mercury with ℥v. of prepared chalk, until the globules are extinguished. This is a tedious process, and the resulting powder is not of uniform strength, nor is the mercury completely rubbed down. Indeed, it is questionable whether the powder, when apparently well formed, always contains mercury, as a compound may be readily formed by uniting other coloring substances with chalk, to imitate blue mercurial powder; and I think I have met with such imitations several times. The blue powder that I have procured from the shops has generally disappointed me; and for a number of years I have prepared it myself, according to the following method:

Take one part of pure starch; eight parts of prepared chalk, and sixteen parts of mercury. Reduce the starch to fine powder. The chalk may now be added, and after being well mixed, the mercury can be united. The powder must next be moistened with water, but not to the extent of wetting it; and the whole rubbed until nearly dry, when the mass should be again moistened and rubbed dry. In this manner the process must be repeated from time to time, as may be convenient, until the powder assumes a uniform bluish appearance. After the chalk seems to be saturated with the mercury, rub the mass perfectly dry, and then moisten it sufficiently to make it adhere to the surface of the mortar by pressing with the pestle. By carefully passing the pestle over the adhering mass, so as to render its surface smooth, the superfluous mercury will now escape from it in small globules and fall to the bottom of the mortar, and the separation may be facilitated by striking the bottom of the mortar against the table repeatedly, and by pouring the mercury over the surface of the mass where any globules appear. The mercury may now be removed from the mortar; and as soon as the mass becomes sufficiently dry, the trituration must be renewed and continued until the mass becomes a smooth, dry powder. Prepared according to this method, I have used blue powder in my practice more than twenty-five years, and have uniformly found it far more certain in its operation than that obtained from the shops. I prescribe it in the ordinary doses, or nearly so, and yet I am satisfied it is stronger than that in general use. I invariably direct it to be administered nearly dry, united with brown sugar, and to be mixed in a cup by stirring the powder and sugar together with a straw or the point of a knife. The dose may then be taken into the mouth and swallowed, first with the saliva, and afterwards with a mouthful of water. This powder should never be mixed in a silver spoon, or any other utensil possessing an affinity for mercury, or the powder may be rendered entirely inert; and such an accident once befel a patient of mine, who nearly lost her life before the cause of failure of the medicine in producing its proper effects was discovered.—*Virginia Med. and Surg. Journal.*

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[*] R. Digital. purp. fal., 1½ oz.; Spirit. œth. nitric., 2 pts. Digest 10 days, and filter.

[†] R. Nucis vomicæ pulv., 2 oz.; Spirit. œth. nitric., 2 pts. Digest 10 days, and filter.

MAMMARY ABSCESS, *treated with Iodide of Potassium.* By J. Y. CARITHERS, of Hendricksville, Ala.

Mrs. S., on the fifth day after being delivered of her second child, complained of pain in her left breast, which suppurated, in spite of the efforts made to prevent it. The abscess was opened and a large quantity of pus discharged; but this gave relief only for a short time, after which other portions of the gland became indurated and proceeded to suppuration, requiring to be punctured. The usual antiphlogistic treatment was tried with only partial relief, when the following treatment was adopted: Three grains of iodide of potassium to be taken in solution morning and night, and to use as a local application the ung. iodini; her diet to consist of nothing but rice. In a few days relief was evident. This treatment was continued for twenty days, when all signs of soreness disappeared. The lady is now suckling her child with no inconvenience, four months having elapsed since the accident.—*Southern Med. and Surg. Journal.*

On Some of the Signs of Incipient Pulmonary Phthisis. By M. Bourdon. It is known with what difficulty the presence of pulmonary tubercles is diagnosticated when the disease is in its incipiency, and how insufficient the stethoscopic signs are. The latter may be wanting when the lungs contain a large quantity of tubercles; they may exist when the lungs contain none: and they may be masked by different sounds. The general symptoms are not a sure means of detecting the disease; a simple catarrh may be attended with very grave symptoms, while a true phthisis may affect the general system very slightly. It is at the commencement of the disease that the diagnosis is most important, because this is the only time that there is a chance of treating it with any success. M. Bourdon has sought to elucidate this obscure point. Attracted for a long time by the frequency of certain symptoms in phthisical patients, he has studied them with care, in order to establish their value as signs. These symptoms are arranged under many heads, according to the organs in which they show themselves: 1.gastric symptoms: 2. hepatic symptoms: 3. thoriac pain. The gastric symptoms are not to be confounded with the morbid phenomena observed in almost all diseases. Those which coincide with the incipiency of phthisis are nauseas, vomiting, epigastric pains, dyspepsia. You must not wait to find these symptoms in every case; nevertheless, they are extremely frequent, since M. Bourdon found them in more than two thirds of his subjects. Some phthisical patients suffer from one of these symptoms; others, on the contrary, have them all combined. Nausea and vomiting are most common; and it is generally after the cough that they exhibit themselves. It must be observed, however, that their frequency or intensity are not at all proportioned to the cough; they occur when the stomach is empty as well as after a repast. Generally the vomiting consists of mucus matter, rarely of bile. Still, while they show themselves with a large number of the tuberculous, they do so in a positive manner with very few. Another very common symptom is the epigastric pain. In the largest number of cases, it is accompanied with nausea and vomiting; nevertheless it occurs alone sometimes. With the largest number of patients it is only manifested upon pressure, or is so slight as not to be noticed by the patient until their attention is attracted to it; in a smaller number of patients it manifests itself spontaneously. Although it shows itself both before and after eating, it is yet most commonly observed after the ingestion of food. Long continued dyspepsia, without nausea or vomiting, is frequently observed. Frequently the gastric symptoms precede the thoracic; but often also they show themselves at the same time or subsequently. Do they imply a lesion of the stomach, is a question which has occupied the author. Sometimes he found the stomach healthy; most frequently it presented some lesion, which was oftenest a papillated state of the mucus membrane. The author thinks the pressure of the tumefied bronchial glands upon the pneumogastric might contribute to the disorders of the stomach.

2. The liver sometimes presents remarkable peculiarities. In half the

patients examined by M. Bourdon there was an increase of volume, frequently attended with pain. The increase of volume seemed to be particularly observable in the right lobe; the consistence of the organ seeming to undergo no change. The changes of sensibility are less frequent than the changes of volume. Spontaneous pains are rare; they only manifest themselves under pressure, or under some sudden and straining movement. In some rare cases this change of sensibility is observed without change of volume. As to the change the liver undergoes, the autopsies prove that in more than half of the cases it is due to fatty degeneration more or less advanced. The bile is generally of greater density and more highly colored.

3. The largest number of phthisical patients suffer from pain between the shoulders and in the sides of the chest: but, besides these spontaneous pains, there are others to which M. Bourdon calls the attention of physicians, and which are only recognized through the medium of percussion. The points where these pains are discovered are numerous, but they are most often seated below the clavicles, and only on the side affected with tubercles. If both sides are affected, the pain is on the side most affected. As to the cause of this pain, M. Bourdon, like M. Beau, is inclined to ascribe it to intercostal neuralgia.

The conclusions drawn by M. Bourdon from his researches are as follows: When prolonged dyspepsia, nauseas, and vomitings are observed, without any assignable cause; when the liver is abnormally developed, without there being hepatitis or disease of the heart; when these phenomena are exhibited independent of any other affection, or in the course of chlorosis, or after measeles or typhoid fever; the physician should turn his attention to tuberculosis, examine the patient with great care, and even when there is doubt of the reality of the pulmonary affection, he ought to act as if convinced, or at least he should take his precautions.—(*Archives Generales.*)—*Virginia Med. & Surg. Jour.*

CALOMEL IN DISEASES OF CHILDREN.

A Coversation Meeting of the "Philadelphia County Medical Society," was held in the Hall of the College of Physicians, Fifth street, on the 5th ult., at 7½ o'clock, P. M. Subject for discussion, "The Uses of Calomel in Infantile Diseases."

Dr. Jackson, of Spruce street, introduced the matter by reading an interesting paper on the subject, which, by request, he had prepared for the occasion. It was evidently the production of a mind accustomed to think, and evinced both judgment and experience; but my recollection will not enable me to do justice either to him or the other members who participated in it. He took a brief, yet general and comprehensive view of infantile diseases, especially those in which he considered the use of calomel as advantageous. In some of the diseases of the brain he believed that its importance could scrace be overrated when given with judgment. It is valuable as a purgative, affording more relief to the oppressed brain than any other, and in small doses, repeated with a view to its action on the general system, it is a powerful remedial agent.

In Scarlatina, although of course he does not recommend it in all cases, he has found it very valuable in many, both in arresting the morbid phenomena, and in eliminating the poison which causes it. In the congestive diseases it cannot be dispensed with, as its action is superior to all others in relieving the congested organs, restoring the lost balance of the circulation, and giving a salutary impulse to the vital powers.

In the inflammatory diseases its importance is well established. It diminishes the superabundant fibrin in the blood, brings about healthy secretions where they are vitiated or suppressed, by an unnatural or torpid condition of the organs, and thus, together with its peculiar action, subdues the inflammation.

In Dysentery it is valuable; he has often given twelve, fifteen or twenty grains to an adult, and repeated it with the happiest effect. In Cholera Infantum we cannot dispense with it. In this disease the brain suffers, and where we undertake to treat it without mercury, and we consider our patient as well, or about becoming convalescent, we may soon be subjected to the mortification of seeing our little patient carried off by cerebral disease. In Hydrocephalus, calomel must be used in large doses, in order to give the patient the best chance of recovery.

Dr. Beesley usually combines calomel with, or follows it by another purgative; he does not continue it in children, as he considers it dangerous, requiring care and watchfulness to prevent it from doing injury, &c.

Dr. Condie thinks it one of the most innocent articles we have, when properly used; he gives it freely, as a purgative, &c., to his own children, as well as to his patients, without any injurious effects; he often combines it with the hydro-chloride of ammonia. The principal caution which he finds requisite, is to ascertain precisely the cases and conditions which require its use. He gives large doses of calomel in croup, after bleeding or leeching; it should not be continued in scrofula or tubercles. Cold water or ice may be given with calomel, and he does not believe that cold air causes it to produce salivation, or any other of the evil effects which are attributed to it. In Cholera Infantum, it should be given in minute doses, frequently repeated. Disease of the brain is often the result of cholera infantum. There is scarce any of the diseases of children in which the remedy specified may not be given with advantage; but when given, discharges that are produced by it should be stopped.

Dr. Jewell gives calomel freely within the year, but would not like to give it within the month. He gives it liberally in croup, in fevers, in cholera infantum, &c., &c.

Drs. Page, Remington, and others, gave their views in full on the subject, but my space will not allow me to give them in extenso, although they were both interesting and appropriate, evincing considerable judgment and experience in the use of calomel in infantile diseases. All who spoke coincided in the opinion that calomel is a valuable, or rather an invaluable remedial agent, in the diseases specified; the principal difference between them was a very slight one indeed: on the caution necessary to be observed in the administration of it: some considered that it required more, particularly when the case rendered its continuance necessary for some time, than others thought requisite. R. F.—*Phila. Med. and Sur. Journal.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, MARCH, 1854.

Small Pox and Vaccination. Nearly every newspaper we take up contains accounts more or less minute of the prevalence of small pox. From these accounts the fact becomes apparent that this loathsome disease prevails as an epidemic throughout a large part of New-England; not confined to large towns and cities but extensively spread through the interior; mostly upon the lines of railroads which offer the most perfect means of conveyance for every species of contagion.

That small pox should prevail as an epidemic at the present time, when the preventive power of vaccination is so well understood by every intelligent person, is a mournful commentary on the imperfection of our sanitary laws as well as the apathy and cupidity of the people generally who neglect to avail themselves of so sure a safeguard against a most disgusting and fatal malady.

We should expect that every one knowing the facts in relation to small pox and vaccination would avail themselves of its preventive power at any loss or expense, but experience proves the reverse to be the case; and even when offered gratuitously they usually neglect or refuse the offered protection.

The present very general prevalence of small pox should induce a general inquiry among medical men whether *they* have done all they might to procure a more general vaccination. Also, whether they can, by a well directed effort, procure the passage of more efficient laws in relation to the same subject.

It is useless to expect the people, even the more intelligent, to take the lead in this matter, and so strong is popular prejudice, among the ignorant, against all sanitory measures that any movement towards the passage of laws tending to promote the general health, must be made with more than ordinary prudence and discretion, or a popular clamor will be raised sufficient to defeat the best devised plans.

As proof positive of the actual practical importance of compulsory vaccination, we append the following facts from the *Medico Chirurgical Review.* They are a small part of the evidence presented to the British Parliament which procured the passage of the present law in relation to compulsory vaccination ;—a law imperfect it is true, but infinitely superior to any thing heretofore in operation in the British dominions.

"*Small Pox and Vaccination.* Although we do not propose at present to enter on a critical review of the subject of vaccination, we are unwilling to omit the earliest opportunity of expressing our admiration of this admirable Report. The small pox and vaccination committee of the Epidemilogical Society, consisted of Messrs. Grainger, Marson, Hunt, Waller A. Lewis, Kestevew, Aiken and Seaton; the latter gentleman being the honorary secretary. These gentlemen put themselves into communication with the several official bodies, and with numerous private practitioners in this country, and by means of the British ambassadors, with the various institutions on the continent. The result is a most complete account of the prevalence and mortality of small pox in different countries, and of the means taken to guard against it through vaccination. The general result of the investigation is, that the protective influence of vaccination is affirmed, and that the virtual obliteration of small pox is proved to be a matter of easy accomplishment for those who will adopt the means of doing so which Jenner pointed out. These conclusions are deductions from the largest mass of statistical evidence which has ever been brought to bear on the question. The registrar-general's returns, the documents of the Poor-law Board, official statements from Mr. Wilde, for Ireland; from Dr. Stark, for Scotland; and from more than twenty foreign governments, form the staple of the Report. It would be extremely difficult for us to present an abstract of the tables, but the following statement will give their main features:

1. To prove the influence of vaccination in England:

Out of every 1000 deaths in the half-century from 1750 to 1800, there were of small pox, 96.

Out of every 1000 deaths in the half-century from 1800 to 1850, there were of small pox, 35.

Either small pox has become naturally milder, or is treated more successfully, or the mortality from it has been diminished by vaccination. That the last is the true cause, can be proved from independent evidence.

2. To prove the influence of vaccination on the Continent:

In various German States, sufficient evidence can be obtained to show that, before vaccination was used, out of every 1000 deaths, there occurred from small pox 66,5.

After vaccination there occurred 7,26.

3. To prove that in countries where vaccination is most perfectly carried out, small pox is least mortal :

(*a.*) In this country, where vaccination is voluntary, and frequently neglected—

	Deaths from small pox.	Deaths from all causes
London,	16	1000
Birmingham,	16,6	"
Leeds,	17,5	"
England and Wales,	21,9	"
Paisley,	19	"
Edinburg,	19,4	"
Perth,	25	"
Glasgow,	36	"
Dublin,	25,66	"
Galway,	35	"
Limerick,	41	"
Connaught,	60	"
All Ireland,	49	"

(*b.*) In other countries where vaccination is more or less compulsory—

	Deaths from small pox.	Deaths from all causes
Westphalia,	6	1000
Saxony,	8,33	"
Rhenish Provinces,	3,75	"
Pomerania,	5,25	"
Lower Austria,	6	"
Bohemia,	2	"
Lombardy,	2	"
Venice,	2,2	"
Sweden,	2,7	"
Bavaria,	4	"

That the immense difference apparent in these two tables is rightly attributed to vaccination, there can be no question.

The Report enters at some length into the comparative use or neglect of vaccination in various parts of England, and shows, as might be expected, that in many places the majority of the population are altogether unprotected.

These statements lead, of course to the conclusion that the only proper course is to make vaccination compulsory. Whatever may be the defects of Lord Lyttleton's bill in some respects, it is undoubtedly one of the most important measures of the session. We are at a loss to know why it has met with so much opposition. Its defects will be easily amended ; and, if they were twenty fold, it must be better to put up with them, rather than delay for another year the benefits of this wise measure."

Hospital Hygiene Illustrated.—*By John H. Griscom, M. D.*—This is part second of the transactions of the New-York Academy of Medicine, and is a *great* book, notwithstanding it contains but twelve pages. It contains some account of the visitation of Typhus or Ship Fever at the New-York Hospital in the winter of 1851–52. The cases of four men who were employed to cleanse and white-wash the wards where the fever had prevailed, (three of whom contracted the disease and two died,) are detailed at some length, to show the virulence of the infectious principle when confined to close rooms with insufficient ventilation.

In contrast with these cases the following letter is introduced to show the effect of *pure air and water* (when plentifully supplied) upon the disease when fully developed. The writer is "a distinguished citizen of New-Jersey, and President of the Board of Trustees of the State Lunatic Asylum."

"Perth Amboy, New-Jersey, *March* 15, 1852.

"Dr. John H. Griscom,

Dear Sir :—Having read your treatise on the "Uses and Abuses of Air," I send you an account of what occurred in this place some years since, and which proves the efficacy of fresh and pure air, not only in preventing, but curing disease.

In the month of August, 1837, a number of ships with emigrant passengers, arrived at Perth Amboy from Liverpool, and other ports, on board of some of which Ship Fever prevailed. There was no hospital, or other accommodations in the town, in which the sick could be placed, and no person could admit them into private dwellings, fearing the infection of the fever. They could not be left on board the ships. An arrangement was made to land the sick passengers, and place them in an open wood, adjacent to a large spring of water, about a mile and a half from the town. Rough shanties, floored with boards, and covered with sails, were erected, and thirty-six patients were taken from on board ship with boats, landed as near to the spring as they could get, and carried in wagons to the encampment, (as it was called,) under the influence of the hot son, in the month of August. Of the thirty-six first named, twelve were insensible, in the last stage of fever, and not expected to live twenty-four hours.

The day after landing there was a heavy rain, and the shanties affording no protection with their "sail" roofs, the sick were found the next morning wet, and their bedding, such as it was, drenched with the rain. It was replaced with such articles as could be collected from the charity of the inhabitants. The number at the encampment was increased by new subjects, to the amount of eighty-two in all.

On board the ship, which was cleansed after landing the passengers, *four* of the crew were taken with Ship Fever, and two of them died. Some of the nurses at the encampment were taken sick, but recovered. Of the whole number of eighty-two passengers removed from the ship, *not one died*. Pure air, good water, and perhaps the rain (though only the first thirty-six were affected by it,) seem to have effected the cure.

No report has been made of these circumstances, and I send this from my recollection, and the information derived from the physician, Dr. Charles M. Smith, who still resides here, and to whom I refer you.

Very respectfully,
JAMES PARKER."

THE TREATMENT OF VESICO VAGINAL FISTULA. *By* J. MARION SIMS, *of New-York, pp.* 28. This Monograph is a reprint from the "American Journal of Medical Sciences," for Jan. 1852. The author having been forced by ill health to leave his former home at Montgomery, Ala., has established himself at No. 70 Madison Avenue, New-York City, where he has "opened an infirmary for the treatment of the accidents of parturition, such as injuries of the bladder, rectum, perineum, etc."

Doubtless he will receive, as he merits, the support of the profession, as he will have facilities for treating this speciality which cannot be commanded in ordinary private practice.

New-Hampshire physicians need not, however, send their patients to New-York for treatment; as we have at home a surgeon who has had a very gratifying success in treating this class of diseases. We refer to Dr. GEO. W. GARLAND, of Meredith Bridge, who has invented some very ingenious instruments for operations in this region. We have the promise of a Monograph on the subject from him, embracing a report of some of his cases, and a full description of the instruments with proper illustrations, which we hope to publish at an early day.

LETTERS ON SYPHILIS: *Translated from the French of Ph. Ricord. By D. D. Slade: Boston, pp.* 404.

This can hardly be considered either an elementary or systematic treatise, but may rather be regarded in the light of a valuable contribution to our knowledge of this disease. Physicians who are called upon to treat the varied forms of syphilitic disease cannot do better than to read this book. Many of its propositions are new and startling, but are the deliberate opinions of one whose experience gives any views he may advance great weight.

The translator has added a very judicious Analysis of the Letters, and has added some few principles of treatment from from M. Ricord's *Clinical Lectures*, as also the "Formulæ of the 'Hospital Du Midi.'"

VERMONT ASYLUM FOR THE INSANE. We have received the seventeenth annual report of this institution located at Brattleboro'. There were in the Asylum on the first of August last 372 patients. The institution has been prosperous and generally healthy. Small pox appeared during the month of March, but by energetic care was subdued in the course of ten weeks—one only, a female seventy-two years of age, died. No males were affected.

Dr. Rockwell, the Superintendent, pays a merited compliment to the employees of the Asylum who unflinchingly stood their ground during the prevalence of the epidemic. He also says:

"Of those placed in the Asylum within six months from the attack, nearly nine tenths have recovered." What stronger argument can be urged upon those who have the fortune to meet with cases of recent insanity that a prompt removal to the asylum is the most proper course.

INTRODUCTORY LECTURES. We have received the following Introductory Lectures; one delivered at the opening of the winter course of lectures, at the Kentucky Scoool of Medicine, by Prof. H. M. Bullitt, M. D.; that of Prof. Paul F. Eve, M. D., at the Nashville School, and that of Prof Jonathan Knight, M. D., at the Medical Institution of Yale College. We would gladly, did our limits allow, quote largely from these eloquent lectures. They are worthy productions of worthy men. Prof. Bullitt dwells upon the connection which Philosophy, in its broadest sense has with Medicine, showing, to use his own quotation, that

> "That very law which moulds a tear,
> And bids it trickle from its source:
> That law preserves the earth a sphere,
> And guides the planets in their course."

Prof. Eve reminds his hearers what *has been* done—the much which remains *to be* done—and the *limited time* allowed any one medical man to contribute his share to the sum of human knowledge which goes to constitue the principles of the science of Medicine; ever remembering in our own case, as in that of our patients,

> "That our hearts,
> Like muffled drums, are beating
> Funeral marches to the grave."

Prof Knight gives a history of the Medical School with which he is, and has been for forty years, connected,—it is the fortune of very few to be spared for such a career of usefulness as has Prof.K., and now clad with years and honor, he is as full of devotion to his profession as in the days of his youth. He describes with a glowing fervor, the sources of gratification afforded in the practice of our profession, and also reminds his hearers, that, "these pleasures however, to be enjoyed, must be won by assiduous, persevering study and labor. They will not flow upon the titular physician, because he may have learnt how to feel the pulse, to examing the tongue, and to administer a cathartic, or an emetic. There must be the careful, diligent study of the pupil, the patient, laborious watchfulness of the practitioner, during his early professional life; the observing eye, the reflecting mind, and the kind and honest heart, to insure such results."

DISEASES OF THE UTERINE SYSTEM AS A CAUSE OF PHYSICAL DEGENERACY, *with general views on their prevention and cure.* By C. D. GRISWOLD, M. D. This is a *popular* work from the pen of the former editor of the Esculapian. Dr. G. has a holy horror of quackery, whether in or out of the profession, and we are glad he has turned his attention to this much abused speciality. His suggestions in relation to prevention are valuable, and cannot fail to do good to all who may read them.

RANKING'S HALF-YEARLY ABSTRACT. *No.* 18, *July to December,* 1853, has come to hand, and is well filled with the cream of the contributions to medical literature for the above named period;—not confined to English periodicals, but embracing articles of real value, selected from American as well as European journals. Price one dollar each number, or two dollars a year.

TULLY'S MATERIA MEDICA. No. 9 has just made its appearance, having been delayed by sickness of the editor and his family. It has so far been well sustained, and it is to be hoped will be completed according to the original design of its venerable author, which will make it one of the most comprehensive works on the subject in the English language.

HYDROPATHIC QUARTERLY REVIEW. *New-York: Published by Fowlers & Wells. Nos.* 1 and 2. As cleanliness is one of the cardinal virtues, and the votaries of hydropathy are of that class who *must* follow some *one idea* to the exclusion of *all* others, we are disposed to welcome this work as a means of doing good by keeping those who would otherwise be swallowing the poisonous drugs of nostrum venders, fully occupied in the use of pure water. For, although now and then one is killed by excessive aqueous medication, the sum of mortality from hydropathy is probably less than from any other form of quackery. This work is beautifully printed, and its mechanical execution highly creditable to its publishers.

As for editors, it is impossible to say on whose shoulders the general responsibility falls. There are articles from several second-rate water doctors, and also from a certain Levi Reuben, who is professor of general and special pathology in the root and herb school at Worcester, Mass.—by which it would seem that there is a fellow-feeling between the washers and the steamers. For ourselves, we cannot see how the exclusive cold drenching of the one class can be harmonized with the lobelia and cayenne of the other, but they doubtless do it through the influence of the *pocket nerve*, which has an important agency in these matters.

OBITUARY RECORD. Died, Dec. 1, 1853, at New-Orleans, of Epidemic Cholera, ABNER HESTER, M. D., the talented editor of the *New-Orleans Medical and Surgical Journal*, aged 40 years. Dr. Hester enjoyed a high reputation as a skillful and experienced practitioner, and a zealous cultivator of our science. His premature death will be a serious loss to the profession.

Died, in New-York, on the 7th of Dec, last, aged 62 years, THOMAS G. MOWER, M. D., one of the senior surgeons of the United States Army, and a gentleman of varied scientific attainments.

Died, in Paris, on the 2d of October, of diabetes, complicated with albuminuria, M. ARGO, Perpetual Secretary of the Academy of Sciences, and Associate Member of the Academy of Medicine, aged 67 years and a half.

Died, in London, on the 25th of Dec. last, JAMES GILCHRIST, M. D., Inspector General of the Army Hospitals, and Corresponding Member of the National Academy of Medicine of France.

☞ CARELESSNESS. We have received a dollar from the town of Lebanon, in this State, enclosed in a letter destitute of a signature. If the writer will forward his autograph, it shall be entered on our list, and a receipt for his money forwarded.

THE AMERICAN MEDICAL ASSOCIATION. The seventh annual meeting of the American Medical Association will be held in the city of St. Louis, on Tuesday, May 2d, 1854.

The secretaries of all societies, and all other bodies entitled to representation in the association, are requested to forward to the undersigned, correct lists of their respective delegations *as soon as they may be appointed*,—and it is earnestly desired by the committee of arrangements that the appointments be made at as early a period as possible.

The following are extracts from Art. 2d of the constitution:

"Each local society shall have the privilege of sending to the association one delegate for every ten of its regular resident members, and one for every additional fraction of more than half of this number. The faculty of every regularly constituted medical college or chartered school of medicine shall

[illegible]

have the privilege of sending two delegates. The professional staff of every chartered or municipal hospital, containing a hundred inmates or more, shall have the privilege of sending two delegates,—and every other permanently organized medical institution of good standing shall have the privilege of sending one delegate."

"Delegates representing the medical staffs of the United States Army and Navy shall be appointed by the chiefs of the army and navy medical bureaux. The number of delegates so appointed shall be four from the army medical officers, and an equal number from the navy medical officers."

The latter clause, in relation to delegates from the army and navy, was adopted as an amendment to the constitution at the last meeting of the association held in New York, in May, 1853.

E. S. LEMOINE,
One of the Secretaries.

The Medical Press of the United States is respectfully requested to copy the foregoing.

RECOMMENDATION OF THE AMERICAN MEDICAL ASSOCIATION. "*Resolved*, That this Association earnestly recommend to our local Societies in different portions of our country, to appoint committees, whose duty it shall be to record the prevalence of epidemics, or other diseases, and the general state of health in their respective localities, and to transmit said reports to the Committees of this Society on Epidemics, through the State Societies where they exist."

The Medical Press is requested to copy.

CONDENSED SUMMARY.

Blood-letting in Diseases of Children. Dr. S. B. HUNT, in the Buffalo Medical Journal, says:—Blood-letting, which is so largely recommended by authors on diseases of children, is in fact ignored in practice. The phlebotomy of an infant is practically as rare an operation as that for tying the carotid; and while this holds true, we can see but little harm in the instructions of authors to the contrary. The free use of antimony and mercurials is also contra indicated by the delicate organization of children, and their extreme susceptibility to impressions on the primæ viæ.

Puepura Hæmorrhagica. T. P. J. Grantham, Esq., (in the Association Medical Journal,) recommends Gallic Acid as a safe, prompt, pleasant and efficient remedy in this disease. He gives five grains every three hours or oftener, and a few grains of Pill. Rhei. comp. at bed time.

Dr. Hunt, of the Buffalo Medical Journal, has witnessed the good effect of a solution of Gallic Acid in Port wine in a case of purpura.

Asthma Spasmodic. M. Trosseau observes that although the *modus operandi* is difficult of explanation, he has relieved many patients during the paroxysms of asthma, by the old plan of burning in the room paper impregnated with nitre.

THE

NEW-HAMPSHIRE

JOURNAL OF MEDICINE.

VOL. IV. APRIL, 1854. NO. 4.

[For the N. H. Journal of Medicine.]

TREATMENT OF SCARLATINA.

MR. EDITOR:—In your February number I notice an article on Scarlet Fever with the doctrines of which, except in light cases of simple Scalatina, I am by no means prepared to agree. Still I have not leisure at present to go into any extended examination of them or statement of the objections to them, but will just relate a case of the disease that occurred here a week or two since and append a few cursory remarks.

I was called to see a robust man, a seaman, a little past the middle age, lately returned from a long voyage in the Pacific, and who had arrived here from Boston on the previous day on a visit to his friends. He complained of intense headache, a severe sore throat, general depression with pain in the back and limbs, chilliness with a hot and dry skin. The throat he said was dry, with a thick viscid secretion which it hurt him greatly to endeavor to remove by hawking. The complaint had begun on the previous day, before leaving Boston, and had rapidly increased in severity. He said that he had taken a severe cold from exposure in going about in Boston, and had several times before had a similar attack from a like cause. Inspection of the fauces in a rather bad light showed great redness and considerable swelling, but my view of it was not very distinct. An emetic was prescribed which he very unwillingly consented to take, from dread of the pain attending the swallowing of it and its operation. He was assured that its free action would be less painful than he expected, and that the head ache and soreness of the throat would probably be materially relieved by it. He accordingly took ipecac, XX grs., tart. ant. 1½ gr. In the evening he was much more comfortable. His medicine had operated freely both on the stomach and bowels; his headache and other pain nearly gone, swallowing less painful and throat more moist. Had had a good nap in the P. M. A small dose of Dover's powder combined with powder of colchicium root was given at bed time, and he was directed to use occasionally a gargle of diluted vinegar with salt in it, and a little black currant jelly, with mild, delicate drinks. He had a good night, all pain gone in the morning, and throat much less sore. He was told to continue the gargle, &c., to repeat the powder at night, and to take in the course of the day at equal intervals, 3 doses of powdered colchium root, 3 grs., sub. carb. soda, 1 gr. Passed a comfortable day, but had a very restless night, and said that he could not sleep for the intense pricking sensation on the skin. I immediately suspected that his disease was different from what had been supposed, and asked if he had ever had the canker-rash. He said, he believed he had, but was not certain. I now examined the fauces in a strong light, and also the surface of the body. Both were well covered with the peculiar eruption of Scarlatina, though none was apparent on his face. He was ordered to take 6 drops of aq. ammoniæ every 4 hours, and a gentle purgative of epsom salts. The next day the rash was fading, the soreness of the throat entirely gone, and the patient said that he felt perfectly well except a sense of weakness. The ammonia was continued, though less frequently for a day or two longer, and the dose of salts was repeated on the next day. After which, medicine was discontinued, as the patient said he felt as well as ever in his life, except as to a little weakness and a great want of something to eat. He said that the first dose of ammonia greatly releaved the soreness remaining in his throat, and after the third day it was entirely gone.

I cannot say how far your correspondent will be willing to consider this case as *cured.* But it seems pretty clear, if the patient's statements of his own sensations can be relied upon, that he experienced great relief from the action of the powerful medicines that he took; and having seen many somewhat similar cases, I am not disposed when the suffering is so severe, to trust to catnip and sage teas, and a warm bed. Nor do I know that the action of a poison admitted into the body may not be greatly modified and checked by suitable treatment. When leisure serves I may perchance be inclined to discuss the subject more fully. S. W.

[For the N. H. Journal of Medicine.]

THERAPEUTICAL VALUE OF OX GALL.

Mr. Editor :—In the Journal for January a treatise on the medical virtues of Ox Gall met my eye; I can indorse every idea there advanced, and more; I have been in the frequent use of the article for quite a number of years, as an injection in constipation,—taken in pills in a dried preparation, and in a fluid state to arrest spontaneous emesis. It is an an anti-emetic of much power, and entirely safe. A little anecdote occurs to my mind which took place in this vicinity some twenty years since.

A man of small intellect, and less cultivation, had a receipt for preparing a strengthening plaster, and some other medicated preparations; of course was dubbed *Doctor*; he was a member of the Baptist church, the pastor of which was attacked with spontaneous emesis, which was not promptly arrested; some brother named Dr. Green; *he* had done great things in this way; a messenger was sent eight miles to inquire for his remedy; he had promised never to divulge, but he would go and see the man; arriving, he called for a hen, secludes himself, removes the liver, punctures the gall bladder, takes the bile and gives it to the patient, the vomiting is arrested, and the church *enamored*. They would have conferred on him M. D., had it been in their power. If my memory serves me he was *canonized*.

This article is here much used by the inhabitants in domestic practice, as a specific in most diseases. I recently listened to praises of a butcher touching gall. He recommended that of the hog as being far preferable to any other. I thought there might be some truth in the remark, for it must be admitted, the lords of creation resemble *that* animal more than any other.

In cases of convalescence, where the liver is torpid, the patient does not improve, has no appetite, how many of us have been benefitted, or at least our patients, by a recipe in a book on the liver by Dr. Saunders—consisting of soap, rhubarb, quassia, gin, &c., but gall is far preferable; use this until the liver resumes its healthy function.

I will insert a recipe, for a preparation of gall which I have used many years as a carminative in the griping and flatulence of infants, and to arrest emesis in adults.

℞. Essence of anise, ʒij., essence of cinnamon ʒij., mix thoroughly; to the above add ʒiv. ox gall,—mix well by agitation.

One drop of this for an infant in some herb tea (from a drop to a teaspoonful, according to age.)

In order to preserve gall pure, I put in a two quart bottle, O.ss. strong alcohol, carry my bottle to the butcher and request him to fill it. I keep it in the cellar. It will keep good for years.

ARIEL HUNTON.

Hyde Park, Vt., 27th Feb., 1854.

[For the N. H. Journal of Medicine.]

CASE OF IMPACTION OF THE RECTUM.

BY JOHN S. FERNALD, M. D.

I was requested to meet Dr. Waterhouse, (then of this town,) in consultation.

Upon arriving at the patient's house, I was informed by her physician that there had been no evacuation from the bowels for five or six days. The patient, C. S., a female, 20 years old, of good health ordinarily, had been unwell for more than a week, when she called her physician. She had had previous to my visit a cathartic and an enema, without effect, except the latter occasioning excruciating distress. It was then ascertained that the rectum could not evacuate itself,—in consequence I saw her.

I ascertained by examination *per vaginam,* that the rectum was excessively distended with feces. Immediately within the sphincter the finger came in contact with a mass of hard fecal matter. The hollow of the sacrum by distension of the rectum was completely filled. The tone of the bowel suspended from over distension.

I formed an instrument from an iron spoon with a hammer and file in the form of a scoop—rude, it is true, but effective—with which I broke down the mass, and by the agency of a finger in the vagina, carefully pressed it from the rectum. After having removed a large quantity in this manner, an enema was ordered, which removed a still larger quantity. A brisk cathartic followed, which completed the evacuation.

It was ascertained that the patient had been living in a tenement to which a grain mill was attached,—that she had been in the habit of eating dry wheat procured from the mill, and carrying it in her pocket. The sequel was the accident before related.

It is a matter for surprise that such accidents do not oftener occur from the known *penchant* which young females have for slate pencil, chalk, coal, &c. The accident is, however, comparatively rare. The habit is serious and not without danger.

STRAFFORD DISTRICT MEDICAL MEETING.

The Strafford District New-Hampshire Medical Society held its forty-sixth anniversary at Physician's Hall, in Dover, January 18th, 1854. The meeting was called to order by the President. The records of the last meeting were then read by the Secretary, and the Society proceeded to its regular order of business.

Frank Tuttle, M. D., of Great-Falls, was now elected a member of the Society.

A choice of officers for the ensuing year then took place, and the following gentlemen were elected:

JACOB C. HANSON, M. D., Great-Falls, *President.*
JAMES FARRINGTON, Jr., M. D., Rochester, 1*st Councillor.*
WILLIAM WATERHOUSE, M. D., Barrington, 2*d* "
ALBERT G. FENNER, M. D., Dover, 3*d* "
J. H. SMITH, M. D., Dover, *Treasurer*
J. H. PAUL, M. D., Dover, *Librarian.*
P. A. STACKPOLE, M. D., *Secretary.*
G. W. GARLAND, M. D., Meredith, 1*st Orator.*
T. J. W. PRAY, M. D., Dover, 2*d* "
W. B. REYNOLDS, M. D., Great-Falls, 3*d* "
M. R. WARREN, M. D., Wolfborough, *Auditor.*

Drs. Smith, Bickford, Ham and Garland, were chosen delegates to the American Medical Association, to be held at St. Louis, May 2d, 1854.

Next in order, Dr. Martin was called upon to deliver his oration, to which he responded.

The Dr. prefaced his extemporaneous speech by an apology for not appearing before the Society with a written oration, as contemplated in his appointment. He then threw himself confidently upon their kind indulgence, trusting it would not be construed by any as a want of respectful consideration for the position, or the body from which it emanated, for surely, he considered it the highest compliment to his ability, acquirements and professional standing, coming as it did from an association of learned, practical medical men, established for nearly half a century, and of acknowledged utility; and further, those who have preceded him as orators to this society have made it honorable by their professional standing, talents and productions.

He then proceeded to say, that the object of the appointment of orators to this society was two-fold: first, the cultivation of medical literature, and that oratory which should characterize and give character to every member of a learned profession: and, secondly, the practical good and advancement of its members—the storing in its archives the memorials of the efforts made to this association for the elevation of the fraternity medically and morally, and to increase the power of its members to serve the afflicted, and to guard humanity from the ravages of disease. The first appointment of orator in this society occurred in 1821,—and the late Dr. Jabez Dow was selected, than whom no one could have been better qualified to fulfil the intentions of the appointment. Dr. Dow, to strong native powers of mind, a good preparatory and medical education and an innate love of the profession.

had, through patient, profound research and observation, added an amount of acquirement, theoretical, scientific and practical, of a broad and most useful character.

His mode of investigation was severely analytical, and his deductions were the result of the application of well established principles, elucidated by comprehensive observation. In the great field of practical medicine and surgery, such powers, and such acquirements, associated with an unfailing aptitude in their speedy application in all emergencies, constitute an invaluable possession to the possessor, and the public with which he is connected. So it was with Dr. Dow's case, for he had a fame and a practice commensurate with his attainments and skill, and the memories of his usefulness and achievements in the healing art, will long be fresh in the public mind, and, I trust, will prove effective incentives to the members of the profession.

In 1822, the late Dr. Jacob Kittredge was appointed. Dr. Kittredge was of medical progenitors, and to good mental endowments—a native proclivity for the profession—activity, resoluteness, endurance and cultivation, added an almost intuitive accuracy in the investigation of disease and propriety of prescription. He was the student of Dr. Dow, and treasured deeply from the clear and copious scientific instruction, and the accumulated practical resources of his preceptor. The instructor and pupil were worthy of each other,—each shared largely in his day of maturity, strength and glory, the confidence of a discriminating public, and the respect and deference of their professional brethren.

The Dr. said he might go on and speak in terms of eulogy as truthful and glowing of most of the catalogue of the annual orators down to the present day, but time would not permit. He then adverted to the formative stage of the society, 1808—the twenty-three pioneers who constituted the first meeting—(they were Drs. Geo. W. Kittredge, William Smith, Moses Colby, David W. Clark, Thomas Linsey, Thomas Shannon, Caleb Morse, Asa Crosby, Benjamin Kelley, Simon Forster, Jabez Dow, Joseph Boyden, Jedediah Chapman, Josiah Lane, Timothy F. Preston, Ichabod Shaw, Samuel Pray, Jeremiah Jewett, Abner Page, John McCrillis, Jonathan Greeley, Samuel Gerrish, Robert Woodbury,)—the reasons which induced them to the effort—the embarrassments and difficulties they encountered in its establishment—the sacrifices of time and money they freely incurred—their love of the profession and their unfaltering aspirations and exertions for its honor and progress,—all of which were presented in terms of glowing eloquence, and illustrated by reading from the records,—and, in conclusion, he thus pathetically alludes to them: "But the melancholy thought invades us, that they have all passed from the active scenes of professional life, and, with three or four exceptions, to that long and changeless home to which we are all hastening. Peace to their names and honor to their memories. Let their names be treasured and revered — their fidelity and devotion to professional duty be held in perpetual recollection, and their examples of perseverance and patient research be emulated by every devotee of our noble art.

> And when we've served our day,
> And we are numbered with the dead,
> May it of us, as them be truly said,
> They acted well their part.

We should love the profession as they loved it—pursue it as unfalteringly and as vigorously as they pursued it, and make progress in proportion to our increased advantages."

He feared the literary and scientific features of the profession were too much neglected by practitioners generally, and the fact too often forgotten, that the best native powers and highest attainments will be unavailing, if not continually cultivated and applied. The field spread out to the votaries of the profession was almost limitless, and he who failed to improve the advantages it presented, was false to himself, the profession and humanity.

Anatomy and Physiology unfold mechanism and vital laws wonderful and inimitable; Pathology exhibits the results of an infraction of the laws of vitality—the wreck and ruin of the physical organization, and the intellectual obscuring or obliteration incident thereto;—Chemistry, Botany and Materia Medica present their treasures of soothing and curative materials;—Therapeutics teaches their applicability, their uses, and Dietetics also, and Surgery unlocks her storehouse of appliances to remedy natural defects and accidental lesions.

The medical practice is one of the highest sciences, and in most countries, is in the hands of the most learned and distinguished men. It presents the sublime and the beautiful in all the paths of natural science, and genius, eminently; as well as cultivates and strengthens all the better impulses of the heart. To soothe the afflicted, relieve the distressed, restore the emaciated and enfeebled when the last hope was about to wing its flight, to calm the perturbed spirit of the departing and bereaved, is a mission purifying and exalting:—one honored and hallowed by the great Physician of body and soul when on his earthly sojourn.

The union formerly of the physician and spiritual guide was beautiful and appropriate. They are kindred callings, and should have a oneness of purpose and action—the amelioration of the earthly condition, and preparation for the supernal state. The good physician must be a moralist and a good Christian. The profession has nothing to fear from foes without, its foes are of its own household; domestic dissensions, personal envyings, and the dishonorable petty strifes of disengenuous and jealous rivalries.

It has a solid basis of facts and science, the accumulation of centuries upon centuries, which have been aggregated by the most gifted and cultivated minds in the civilized world. It has its foes, and so has all good. But impotent will be all the efforts of all the empirics, the assaults of all the pathies and isms of whatever medical heresy, if the members of the regular profession only deport themselves in a just and fraternal manner to each other. They must abandon selfishness and cultivate mutual interest; they must uproot jealousy and plant mutual confidence; they must respect and love each other; delight in the fame and prosperity of each other, and extend the fostering hand to each other, especially to the young practitioner; he who has more trials to meet, more difficulties to encounter and more sleepless, anxious nights in prospect than any member of any other calling; and he who would hedge up his way and multiply his perplexities deserves the severe reprobation of all liberal minded persons in the profession or out. Our functions to officiate at the induction of humanity into this breathing world, to observe and protect its progress through it, and to mitigate its exit out of it, are surely important, responsible and big with vital interests.

Physical symmetry, perfection and beauty, health, mental power and happiness, hinge much upon our science, judgment and skill.

On motion of Dr. Fernald, the thanks of the Society was unanimously voted to Dr. Martin for his able, instructive and eloquent speech.

The Annual address of the President, Dr. Hanson, of Great-Falls, upon medical etiquette, was a well written paper, and characterized by that ability, judgment and propriety of sentiment for which he is so justly distinguished.

Dr. Shackford, of Great-Falls, read a paper upon Quackery and its abettors, in which he ran an interesting parallel between Empiricism and scientific enlightened medical practice. The paper evinced research, thought and a just appreciation of scientific attainments, and a well regulated deportment in the members of the profession.

Dr. Moulton, of Ossipee, read a paper descriptive of the objects and doings of the American Medical Association, a session of which he attended at New-York City, in May last, being a delegate from this Society. He gave a minute detail of the whole proceedings of the Convention; embracing the leading characteristics of the prominent members, with the discussions upon the various topics brought before the Association; and a particular allusion to the papers reported from the standing committees.

The report was drawn up with great care, and contained much interesting and useful information.

Dr. Bickford, of Dover, read a paper on the *natural history* of Medicine, illustrating thereby the nature and reality of medicine as a science and as an art—

Anatomy, Physiology and Pathology, the basis upon which this science rests, though for a long time pretty well understood, have within the last few years, through the aid furnished by the microscope and by chemistry, made rapid progress toward perfection, and would compare favorably with any of the natural sciences.

He gave the natural history of several diseases to illustrate the exactness of our knowledge of their Pathological Anatomy, and our knowledge of the symptoms by which they are revealed to us during life.

He divided diseases into family groups for the purpose of illustrating the power of medical art, to modify and control them; exhibiting a long catalogue of brilliant achievements of inestimable value to humanity; and though this art somtimes fails to make itself felt, yet it is not the fault of science, but that some diseases are in their very nature and constitution incurable.

In this connection he made some extended remarks on consumption, a disease which in some climates destroys one fifth of the human race.

This disease when fully established, has a strong tendency toward death, and in the present state of our knowledge in the great majority of cases, we are unable to arrest that tendency; but that in view of the many and important discoveries of the last few years, and our increasing knowledge of the causes and influences which give rise to and develop it, we may indulge the hope of finally being able to cure consumption as we now cure many other diseases; or, at least, that we may be able to point out the causes and influences that give rise to it, so that they may be avoided, and the disease in a good degree eradicated.

Medical science has already done much in this particular, and though the causes of many diseases of the most fatal character have thus far wholly eluded the search that has been made for them, yet with many other diseases this is not the case, their causes have been in a good degree determined and pointed out, and the diseases to which they give rise in many cases prevented.

And in conclusion said "that the small pox, formerly prevailing in all climates, attacking alike all ages and classes, but now by the substitution of a mild disease, attended with neither danger nor scarcely any inconvenience, had become nearly extinct:—a triumph of science and philosophy unequalled in the annals of history."

The Secretary would like to have given a more extended notice of the President's address, and also of Dr. Shackford's oration, but their manuscript was not left with him.

The papers contained much valuable and useful information, for which the Society gave the following expression:

Resolved, That the thanks of this Society be presented to the Dissertators, for the learned, instructive and eloquent papers just read, and that the same be requested for deposit in the archives of the Society, and for publication if the Society so direct.

The Society was largely attended, and the report of cases and the discussion upon various medical topics, together with the interesting essays, made the session full of interest.

P. A. STACKPOLE, *Secretary.*

CASES OF LEAD DISEASE TREATED IN THE NEW-YORK HOSPITAL BY THE IODIDE OF POTASSIUM.

BY H. S. SWIFT, M. D., RESIDENT PHYSICIAN.

Within the last few years, the attention of the profession has been directed to that class of diseases produced by saturnine poisoning; but more especially since the publication of the plan of treatment proposed by M. Melsens—that of eliminating the metallic poison from the system by the iodide of potassium. This plan has already received such a favorable notice that it will not be necessary to refer to its details. Within the last nine months, we have had an opportunity of testing its value sufficiently to establish its efficacy. Although the leading facts have already been published in a former number of this journal, a more detailed account of the cases may perhaps be of interest.

This treatment was adopted in 23 cases, and the results thus far have been highly satisfactory. In 13 instances the urine was submitted to chemical analysis, and the investigation has established the fact that the lead may be eliminated from the system by the iodide of potassium, and found in the urine. In no case was the lead detected before the administration of the remedy. The chemical analyses were made by Prof. Outram, and the results of his experiments are perfectly reliable.

All the patients began to improve rapidly after this treatment was adopted, though they had previously resisted the ordinary means. No bad effects resulted from the long continued use of the remedy. In two cases, as M. Melsens suggests may occur, the symptoms were at first slightly aggravated,—one of them was profusely salivated while under treatment, and the other slightly so. One patient also suffered from coryza and gastric disturbance for a few days; but the treatment was only suspended for a short time. One patient was under the influence of the iodide of potassium for six months, one for five and a half, and another for four months.

In case 6, the urine was examined shortly after the treatment was commenced, and merely a trace of lead was detected. The quantity sensibly increased, until it was clearly shown both in the urine and saliva; and as the patient convalesced, it disappeared entirely, and the iodide of potassium was found abundantly in the saliva. In case 5, we did not suspect the existence of lead poisoning until after the patient had been put upon treatment for constitutional syphilis. While under this treatment, a well defined "blue line" appeared upon the gums. The urine was then examined, and found to contain lead.

Of the twenty-three cases treated by the iodide of potassium, sixteen have been discharged cured, and three so far relieved as to be able to resume their ordinary duties; four are still under treatment, and are gradually improving.

Thirteen of the patients suffered from lead colic, complicated with neuralgia, arthralgia, &c., four had paralysis of the wrists, and in six the paralysis was general.

I select the following cases as the most interesting in which the iodide of potassium was used:

Case 1. Jas. B——, a druggist, had complained for six weeks of constipation, tormina, weakness of the legs, paralysis of the extensors of the right thumb, and tendency to dropping of both wrists. He was admitted Aug. 9th, 1853. The peculiar blue line existed along the margin of the gums. He was pale and emaciated, and so feeble that he could not walk without assistance. The urine was examined, but without finding lead. He was then ordered potass. iodid., grs. v. *ter in die*, gradually increased to ʒi. *per diem*. After a few days, lead appeared in the urine. The urine, which at the time of admission was scanty and high colored, became natural in quantity and color. He had been under various kinds of treatment, with no benefit. His disease had never been suspected. He now rapidly regained his flesh and strength. The neuralgic pains entirely disappeared, and he was able to walk about the ward. He left the hospital Sept. 10th, at his own request.

Case 2. Hugh D——, æ. 28, a native of Ireland, tinsmith, admitted April 9th, 1853, at the same time with a younger brother, Dennis, both suffering from lead disease. He stated that in Aug., 1851, his father's family, consisting of four males and three females, moved into a house which had been painted but three days previously. There were also two boarders, who remained with the family a whole year. Three weeks after this exposure to the influence of lead, the youngest of the family, a lad of 17 years, became affected with twisting pains in the abdomen, constipation, and the ordinary symptoms of lead colic. Six weeks after, these symptoms were followed by complete paralysis of the upper and lower extremities. In the week following, the father became similarly affected, followed in one year by general paralysis. Both of these have since died. This patient enjoyed good health until Dec., 1852, sixteen months after the exposure to the paint, while the other brother, Dennis, was unaffected until February last. The females and two boarders have been exempt from the disease. All these patients followed different occupations, none of which had any connection with lead. The father was a wood turner; the younger brother had no employment, and Dennis was a harness maker. The water was supplied to them from a wooden pump. No leaden vessels were employed about the kitchen; and, remote as the case may seem, no other general exposure to lead could be ascertained than the one above referred to.

In Dec., 1852, the patient began to complain of symptoms of lead colic. These continued until the time of his admission, in April. His bowels were obstinately constipated, and were never moved without cathartics. He continued to perform his daily avocation, with slight interruptions, until January, when the symptoms became so severe as to compel him to give up work, and he has been confined to his bed most of the time since. A month ago, he noticed a "burning sensation" and soreness in the soles of the feet which gradually extended up the limbs. This was soon followed by a feeling of numbness, but there was no loss of voluntary motion. Three weeks after, the same soreness appeared in the left deltoid muscle, which, in like manner, extended down the arm. This was shortly followed by dropping of the wrist, and paralysis, and dropping of the little, ring, and middle finger in succession. The thumb and index finger have never beeen affected. In about one week, the same phenomena occurred in the right arm. Ten days since, he observed partial paralysis of his limbs. At the time of admision there was complete paralysis of the arms and wrists, imperfect control of the lower extremities, and lead colic. The gums were softened and ulcerated, but the blue border of the gums was well defined.

He was ordered pil. strych., gr. $\frac{1}{16}$, *ter in die.* Six days after, he noticed abdominal twitching, evidently produced by the strychnine. The bowels were then freely moved, and were open regularly without cathartics during the remainder of the time he was in the hospital. His urine was submitted to an imperfect examination. There were no evidences of lead. On the 13th, he commenced the iodide of pot., grs. xv. *in die*, gradually increased to ʒ i. On the 25th, the pains in the soles of the feet, which had been unusually severe, had entirely left him. The limbs had decidedly improved, while the upper extremities remained the same. Takes pot. iod., ʒ i. *in die.*

May 13th. Is able to walk about with little effort, and is gradually regaining the use of his hands. The blue line has nearly disappeared. July 6th, was able to assist in the work of the ward. There was no lead in the urine. Two weeks after it, it appeared in the urine, and iodide of potassium was found in the saliva. Sept. 18th. The evidences of lead had disappeared. He was discharged cured on the 14th of October.

CASE 3. Dennis D——, brother of the last-named patient, aged 22, a harness maker by occupation, was admitted April 9th, 1853, with entire loss of the use of the arms, imperfect control of the lower limbs, and lead colic. In his case, the thumbs and index fingers were paralyzed and drooping, while the other fingers were unaffected. The same treatment precisely was pursued.

May 15th. He was able to walk without assistance, and was gradually gaining the use of his arms. July 13th. Lead was found in the urine and saliva. Patient was profusely salivated, and the treatment suspended two weeks. There is no reason to suppose that this salivation was owing to the "liberation of mercury" by the solvent power of the iodide of potassium.

Sept. 18th. There were no evidences of lead in the urine.

Nov. 1st. He entirely recovered the strength of his hands, though slight paralysis of the fingers remained. Was discharged decidedly relieved, Nov.

19th. Since he left the hospital, he has been able to gain a livelihood, and is gradually acquiring the use of his hands. In both these cases, the reason the lead did not appear earlier in the urine, is probably owing to the imperfect manner in which the examinations were made. The first specimen submitted to the analysis of Prof. Outram contained lead, though several days had elapsed since the last examination.

Case 4. A laborer, aged 30, was admitted April 6th, 1853, with lead colic, pains in limbs and soles of feet, constipation, &c. The attack was referred to drinking water which was brought a long distance in leaden pipes. His bowels were never moved without medicine. Ordered pil. strych. gr. $\frac{1}{16}$, *ter in die.* On the 10th, he noticed abdominal twitchings, and his bowels were freely opened, and they remained so while he continued under treatment. On the 20th, he began to convalesce from an attack of typhus fever, contracted in the house, and then became affected with general paralysis. He was much prostrated by the attack of fever, and convalescence was very slow. May 14. He was ordered pot. iodid. grs. xv *in die*, increased to ʒ i. At the time he commenced taking the iodide of potassium, he was so much prostrated as to require porter and generous diet. He had no power whatever in his arms, and his gait was so insecure that he could not walk without assistance. He, however, began to improve rapidly, and in one month was able to feed himself and walk unassisted. July 6th. The urine was carefully examined, but no lead was detected. On the 13th, it was ascertained, by chemical analysis, to exist in the urine and saliva. He was completely cured, Oct. 11th.

Case 5. Peter Conway, 50, Ire., porter, was admitted June 20th, 1853. He had complained for several weeks of constipation and vague neuralgic pains in various parts of the body, especially in the abdomen and lower extremities. There was no blue line on the gums, and we did not suspect the presence of lead. The pains were regarded as syphilitic in their character, and he was put upon teatment for constitutional syphilis. He had had the primary disease several years before. After taking the iodide of potassium a short time, a well-marked blue line appeared along the margin of the gums. The urine, on examination, was found to contain lead.

Case 6. A vocalist, aged 33, was admitted May 21st, 1853, much prostrated from an obstinate attack of diarrhœa, which had troubled him for two months. His health had also been much impaired by his previous intemperate habits. His constitution was entirely broken down. It was feared that he was suffering from incipient cirrhosis. There was tenderness over the right hypochondrium. The liver was enlarged; the urine high colored and scanty; the countenance sallow, and the conjunctiva tinged yellow. He also complained of neuralgic pains in the limbs, excruciating pains in the soles of the feet, and a partial loss of power in the limbs. The treatment was first directed to the diarrhœa, and measures adopted to restore the general health. On the 26th, he noticed slight paralysis of the extensors of the hand, which increased so rapidly that on the 1st of June there was dropping of both wrists, and he had scarcely any power over them. The limbs were also completely paralysed. There was no blueness of the gums. He had never suffered from colic. He had previously stated that he was not aware of having been exposed to the influence of lead. He now remembered to have spent several nights in a newly painted saloon, and that he had drank freely of champagne, the inferior qualities of which are known to contain some preparations of lead. The paralysis, from these circumstances, was regarded as depending on saturnine poison. His urine was examined, but no appearance of lead was observed. June 5th, he commenced taking the iodide of potassium in small doses, gradually increasing, so that he took ʒj of iodide. On the 13th there were slight traces of lead in the urine, and in five days the quantity had sensibly increased, and on the 20th, the evidences of lead were very decided, both in the urine and saliva. He had then been under *full* treatment for a month. The improvement in his case was truly remarkable. His flush had reäppeared; he had entire use of his hands, and was able to move his limbs at pleasure, though he had not sufficient strength to walk. Sept. 18th. Lead had disappeared from the urine. Oct. 1st. The treatment was discontinued, and he was ordered strych. acet., grs. $\frac{1}{50}$ *ter in die.* He is now gradually regaining the power of his limbs, and is able to walk without assistance.

The cases of lead colic were not so satisfactory to us, as the patients were unwilling to remain under treatment after the more acute symptoms had disappeared, when, as they believed, they were cured. The blue line, however, disappeared more rapidly in those who were treated by the iodide of potassium, and the chemical proof of the lead in the urine leaves but little room for doubt that the system might be entirely relieved of the saturnine poison, and that the cure would be both radical and complete.

The value of this remedy in metallic poison is fully established by the observations of M. Melsens himself. In a single case of salivation, where this treatment was adopted, I have seen the mercury eliminated through the kidneys, and found in the urine.

Whether the pathology of these diseases, as sustained by M. Melsens, be correct or not, the deductions from it cannot now be questioned; and, with our present knowledge, the iodide of potassium as a remedy in these affections must hold the highest position. The subject is of course a new one, and opens a wide field for observation; but the success of this treatment cannot but be looked upon with interest. In none of the above cases was the treatment so fully carried out as proposed by M. Melsens. The maximum dose was ʒi. in 24 hours.

The treatment of constipation attending lead colic by strychnine, has been introduced into the hospital within the last two years. In some cases it had a most happy effect. Supposing the constipation due to a paralysis of the muscular coat of the intestines, it is rational to suppose that when this is fully overcome, the bowels would act of themselves, and thus this symptom would not only be relieved, but cured. In most instances, cathartics are merely palliative, and patients are constantly obliged to resort to them. Why not treat this paralysis like the paralysis of the hand or limbs? Cases 2, 3, and 4 were treated by the strychnine. In 3–6 days the patients noticed slight abdominal intestinal (?) twitchings. This was soon followed by copious and free discharges from the bowels, and they remained soluble the remainder of the time they were under treatment, though for several weeks before they were obliged to resort to laxatives. In some cases where the symptoms resulting from constipation were urgent, its action was hastened by an enema, or even by cathartics. In two instances a diarrhœa supervened, and continued until the strychnine was suspended. In other forms of paralysis, strychnine is known to have the opposite effect. In two cases of paralysis not depending on lead, the bowels became confined while under its use. Its efficacy in chronic diarrhœa is now generally admitted.

The injurious effects produced by the emenations of lead are much more frequent than is generally supposed. By referring to the records, I find that forty-seven cases of the different forms of lead disease have been treated in the New York Hospital within the last two years. Many of them had been treated for "neuralgia," "colic," "enteritis," &c., before their admission to the hospital. The true nature of their disease was not suspected, not because they could not have been easily recognized, but simply because too little attention has been directed to this particular class of diseases. Case No. 5 may be cited as an illustration of this truth. There was no cause in that case to suspect the existence of lead poisoning. The patient was not aware of having been exposed to its influence, and the prominent symptom—the blue line along the gums—was entirely absent. This symptom was present in forty-five of the forty-seven cases attended to. The paralysis in case 6 might have easily been mistaken for an entirely different disease. The iodide of potassium established the diagnosis in the one, and confirmed it in the other.

Recent experiments have established the fact, that one frequent cause of lead diseases is the emanation of lead from newly-painted apartments. This cannot be too forcibly dwelt upon, as many have doubtless sacrificed their health through ignorance of the fact. By the following table, eight patients could refer their attack to sleeping in a room freshly painted. I have seen a whole family affected with lead colic from this cause alone. In cases 2 and 3, it may perhaps be questionable whether the attack could be referred to this cause, as so long a time had elapsed between the exposure and the development of this disease.

The following cases have been received into the New York Hospital since September 14th, 1851.

Probable cause.		*Form of Disease.*		*Cured.*	*D'schr'd by request.*	*R'liev'd.*	*Improving.*
Painters...........	19	Lead colic, neuralgia, and arthralgia....	33	29	2	1	1
Gasfitters, from using cement composed of the carbonate of lead.........	3	Partial paralysis....	7	4	1	1	1
From sleeping in a newly painted apartment.......	8	General " ...	7	4		1	2
From drinking soda water...........	6						
From drinking water from leaden pipes.	1						
Workers in acetate of lead..........	1						
Unknown..........	9						
Total..........	47		47	37	3	3	4

New York Hospital, January 16, 1854. *N. Y. Medical Times.*

Elimination of Lead by Iodide of Potassium. *Reported to the Biological Society by J. Outram, Jun., Lecturer on Chemistry in the New-York Preparatory School of Medicine.* The value of iodide of potassium as a therapeutical agent in cases of lead and mercurial poisoning, is now well known, many cases having been cured by this treatment alone, in our hospitals. M. Melsens (the originator of this treatment) has given several cases of both lead and mercurial poisoning, which he had treated successfully by this means. He was of opinion that the metal was acted upon by the iodide of potassium converted into a soluble salt and eliminated through the kidneys. To prove this to be the case, the metal must of course be found in the urine. This M. Melsens did not show, as he did not examine the urine chemically.

I have lately had an opportunity to examine the urine of several patients at the City Hospital, who have been under the above treatment for lead disease, and the experiments have entirely corroborated M. Melsen's theory, viz.:

That the lead is *not* eliminated before treatment; and

That it is eliminated in the urine after treatment.

The following is the process to which I subjected the urine. I evaporated it to dryness, and burned the residue until all the organic matter was driven off. This residue I boiled in dilute nitric acid, filtered, and then precipitated the lead by a stream of sulphureted hydrogen gas. Where the metal was present, it was thrown down as a black sulphuret.

I examined a number of samples of urine before the patients had been put on M. Melsens' treatment, and could not detect any trace of metal; while in those examined after treatment, the evidences of the metal were well marked. Sometimes, however, the lead could not be detected until the patient had been under treatment for some time. In most of the cases in which I detected the metal, the patients had been under treatment for at least four days; but in one case which I examined every second or third day from the time of his admission into the Hospital, it was about two weeks from the time of his being put on treatment till the time I first detected the metal in his urine. The dose of iodide of potassium that was given in those cases was ʒi daily, in divided doses.

There was one patient to whom iodide of potassium was given for another case. After a few days, the characteristic blue line appeared on the gums, and, in a day or two afterwards, I detected lead in his urine.

The quantity of urine examined each time was not less than six ounces. I have examined twelves cases from the Hospital, and three or four from private practice, and all of them with highly satisfactory results.—*N. Y. Med. Times.*

THE TREATMENT OF ERYSIPELAS ANALYZED.

BY SANFORD B. HUNT, M. D.

I propose to bring the various remedies employed in the treatment of erysipelas to the test of a critical analysis, based on the ascertained facts of the disease; laying down first the proposition, that we should exhibit no remedies without knowing why we do so.

When a few years since malignant erysipelas first prevailed to an alarming extent in this section of country, the views of medical men, both as to its pathology and tendencies, and as to its treatment, were unsettled and unsatisfactory. The epidemic of 1844 and '5 was exceedingly fatal, as might have been expected in this state of medical opinion. Sundry points of pathology were at that time settled in the minds of thinking and observing men. Among these the following may be laid down as propositions, then verified and placed among the facts of the profession:

1st. Erysipelas is a contagious exanthem, originating in the presence of a specific blood poison, either conveyed into the system by contagion, or developed there by certain morbid processes not understood.

2d. The tendency of erysipelas is toward recovery by the self elimination of the blood poison.

3d. The action of this poison depresses the vital powers, but not usually to a fatal degree. When the poison is directed from the surface toward the nervous centres, we shall have symptoms much more alarming than when it expends itself in cutaneous inflammation.

Probably these propositions are no novelties, and will be readily acceded to by all who have carefully watched the disease in question. I shall not, therefore, enforce them by any argument, but shall confine the scope of this article to sundry deductions as to treatment, derived from these data.

1st. If erysipelas is a contagious exanthem, analogy would lead us to suppose that its management should be governed by the same rules which guide us in other principal exanthemata, viz., scarlatina, rubeola, variola, varicella, and continued fever. All these disorders belong to the same family, and are subject to the same laws. All have their origin in contagion, though some of them may be self-developed. All of them depend upon blood poison as their cause. All are self-limited; in all of them an abortive treatment is perhaps impossible; in all of them the degree of danger depends upon the degree to which the nervous centres are affected by the poison; and in all of them that treatment will be most successful which most favors the elimination of the specific poison. These analogies are worthy of consideration. We may argue with tolerable certainty from one to the other, and may readily conclude that one principle of treatment should govern the whole. And in the whole art of therapeutics no principle is better established than that depletion is inadmissible in all this class. Erysipelas is a blood poison. Therefore any merely local treatment must be generally insufficient. I say *generally*, because there are many cases in which this poison expends itself almost as locally as does vaccinia in its usual mild career. Of course, in such cases local treatment will be not only sufficient but superfluous. Prof. Bennett saw in the Hotel Dieu a number of cases which were receiving no treatment—M. Louis asserting that erysipelas of the scalp was never fatal. And this accords with all our preconceived notions of eruptive diseases. When the eruption comes out fair, thus affording the best chance for elimination; when it occupies only its natural locality, the skin, and is thus uncomplicated with visceral inflammation, we expect a recovery *tuto, citoque, jucunde*, without much, if any medical interference, and the only judicious treatment in any of these diseases is that which directs the morbid matter in common with the whole tide of circulation toward the surface.

The elimination of the specific poison of erysipelas is conducted by the usual emunctories—the skin and the kidneys. Free diaphoresis exerts a most favorable influence upon the progress of the disease, tending to shorten the process of elimination. The occurrence of desquamation, even when no bullæ exist, indicates the effusion of fluid beneath the cuticle, and it is not improbable that this effusion subtracts its quantum from the sum total of disease. The relative quantity of urea in the blood seems to have in this, as in all other exanthemata, an influence upon the severity of the disease. But what this influence is we do not know, though we may hope that with our present means of investigation the thing may soon become clear.

In erysipelas, as in other desquamative disease, we find frequently—not always—the accompanying sign of albuminuria. This occurs at the period of declination, and depends upon the solution of the renal epithelium in the urine. That this is a part of the process of elimination is not proven, and it may be found to depend upon a local disorder of the kidneys, incident to the increased secretion of urea occurring at the period of declination. The plain indications of treatment derived from these natural phenomena, are to encourage the secretions of both the skin and the kidneys.

2d. The tendency of erysipelas is toward recovery. This is proven by the small average of deaths—the recovery of very many cases in which the disease has run its course uninfluenced by medication, and finally by the analogy derived from the natural history of other eruptive diseases.

3d. Whenever the symptoms become alarming it is not from the acute or destructive character of the inflammation, but from a depression of the nervous energy. Gangrene is of extremely rare occurrence. Abscess is more common, but still so unusual as not to be classed among the natural sequelæ of the disease. When erysipelas assumes a bad type, we find the inflamed surface looses its lively red, and acquires a dark, purple hue; the skin is dry; the urine suppressed; the tongue has a dry brown crust; the teeth are covered with sordes; the pulse grows frequent and fluttering; delirium and coma are present; in a word, we have typhoid symptoms. All this retinue of bad signs have their origin in a morbid impression on the great nervous centres, and we readily draw the indication of a supporting treatment. If the disease pursues its natural course, finding outlet by the skin and kidneys, we shall have the vital powers unimpaired, the reason clear, and the pluse—the great indicator of nervous disorder—undisturbed. But when from any cause, the poison is retained in the circulation, and goes on increasing by zymosis, we shall find that the brain becomes congested—that the disease has left its wonted channels, and is expending itself upon organs more important—upon the great moving power—the *nodus vitæ* itself.

It seems to me that if what I have advanced be true, we have a sufficient basis for a scientific and successful treatment of erysipelas, which by a parity of reasoning will apply to the other eruptive zymotics. It is not probable that those things yet unexplained will have the same important bearing upon treatment as the facts already in our possession.

Treatment. Most of our systematic authors speak of bleeding as admissible, and even praiseworthy, in the country, but not admissible in the form of the disease seen in cities. But if what has been said about the tendencies of the disease to typhoid action, the little danger of an unfavorable result from the extent or violence of inflammatory action, and the importance of maintaining the nervous system in full vigor, be of any moment, then is a bleeding in erysipelas as unphilosophical as in continued fever, variola, or any other exanthem. The safety of the patient lies in the activity and lively character of the local inflammation; for the extent of the inflamed surface is only an indication of the amount of blood poison and the activity of zymosis.

The diaphoretic treatment seems, at first view, to be theoretically and practically correct, as indeed it is. But to secure diaphoresis, we should not administer those drugs which, by their depressing influences, lessen the nervous energies—*e. g.*, antimony. There are, however, diaphoretics of a different class, to which no such objections can apply, as the acetate and carbonate of ammonia. Whiskey punch, which at first view would seem a good stimulant diaphoretic, is objectionable on account of the reaction and torpor of the nervous system following its use.

Diuretics are also indicated, but the antagonism of the skin and kidneys renders it difficult to meet both these indications at once. Perhaps colchicum, tending directly to the removal of urea, might be found the best of diuretics.

But even these indications, important as they are, yield to the necessity, in serious cases, of supporting the nervous powers. Quinine is thus valuable, and here do we find what I conceive to be the true theory of Hamilton Bell's treatment by the Tinct. Ferri Muriatis. He himself argues that the capillaries are in an atonic state, and that the system being rapidly saturated by this powerful astringent, the atony is removed. Evidently if this were true, cold affusion would be equally successful. In the only case in which I have had the opportunity to observe the action of this remedy, it was commenced twelve hours after the appearance of the eruption. The pulse was 100, full, and firm. Fifteen drops of the muriated tinct. were given every two hours. A cathartic was given with the first dose. The patient was a blacksmith, aged 35. There was no other treatment, either general or local. Under the remedy he sweat profusely, and forty-eight hours after the treatment commenced, the pulse was 72 and soft, and the swelling, which had occupied the whole face above the mouth, closing both eyes, was declining. He convalesced rapidly. This is a single case. Perhaps a collection of cases might give a different result, though this case is similar to those reported by Dr. Bell in all particulars. In attempting to explain the action of the remedy we may say this much: The iron is a good tonic, and is *prima facie* as well adapted to the disease as quinine. Perhaps by the action of iron the nervous system is exalted to a pitch which enables it to exert its whole energies in throwing off the poison.

Catharties. Probably there is no case of erysipelas which will not at some time in its course be the better for cathartic action.

Another corollary to our proposition is, that all local applications further than those tending to relieve itching and pain, are unnecessary and mischievous. If by local applications you cut short the inflammation, you lengthen correspondingly the disease. This may not hold true in a far advanced stage of the disease.

It will be seen that by this process of analysis from established facts, we rather subtract from, than add to our armamentaria against this disease. The whole treatment is reduced to a simple combination of tonics, diaphoretics, and diuretics. The peculiar remedies which have my preference I have indicated, viz., iron, colchicum, and the acetate of ammonia; but it is probable that other articles of the materia medica may fulfill the same indications, nearly, if not equally as well.—*Buffalo Med. Journal.*

STYPTIC BALSAM.

Editor of New York Medical Times:

With a view to a more extensive publicity to the above-named remedy than I have been able to give by private means, I avail myself of your journal for that purpose.

It is nearly thirty years since I commenced the use of this balsam as a styptic, in the various forms of hemorrhage which are within the domain of medical pathology, and with uniform success.

I am satisfied that no remedy now known exerts a more specific power and more speedy relief, especially in hemoptisis, hematemesis, epistaxis and menorrhagia.

It acts both by its sedative power, in diminishing the force of circulation, and by its astringent qualities, in contact with the bleeding vessels. In the treatment of hemorrhage, neither blood-letting, confinement to the room, suppression of the voice, relaxation from business, nor other precautions, are necessary: nor is any auxiliary treatment required, except, perhaps, a dose of Epsom salts, where there is evidence that blood has been swallowed.

Ordinary exercise in the open air is decidedly preferable to inaction; and wherever there are premonitory symptoms of a return of hemorrhage, it has always exerted a prophylactic power when promptly used; and by this early resort to the remedy, many radical cures have been effected.

The following is the formula and method of using it:

R. Acid. Sulphuric. (by weight), ʒ v.

$$\left.\begin{array}{l}\text{Spts. Terebenth.}\\ \text{Spts. Vin. Rect. } a\ a\end{array}\right\}\text{ f. ʒ ij.}$$

Place the acid in a Wedgewood mortar, and add the turpentine slowly, stirring it constantly with the pestle; then add the alcohol in the same manner, and continue stirring it until no more fumes arise, when it may be bottled, and should be stopped with a ground stopper.

It should be prepared from the purest materials; and when done, it should exhibit a dark but clear red color, like dark blood; but if it be a pale, dirty red, it will be unfit for use. The dose is 40 drops, and the method of using it as follows:

Put a tea-spoonful of brown sugar in a common sized tea-cup, and rub in 40 drops of the balsam until it is thoroughly incorporated, and then slowly stir in water until the cup is nearly full, when it should be immediately swallowed.

This dose may be repeated at intervals of an hour, until three or four doses are taken, if necessary; and its use should be discontinued when fresh blood ceases to flow. After standing a few days, a pellicle forms upon the surface of the balsam, which should be broken, and the liquid below it used. It does not deteriorate by age, if tightly stopped.

Very truly yours,

JAMES WARREN.

New York, 25*th December*, 1853.

N. Y. Med. Times.

Pocket Probang.—A private note from a medical friend has been received, which contains a description of a very convenient series of instruments for making applications to the throat and air passages. Although he promises a more complete description of them, as well as illustrations, which might be more striking to the eye, we do not feel justified in withholding them from the profession, for fear something may prevent the fulfillment of the promise. Any one, who, either in the city or the country, has been obliged to carry with him the long probang, with the fixed sponge, will appreciate the convenience of this jointed instrument, with its simple, but effective contrivance for changing the sponge, as well as serving for a portcaustic.

"Since the publication and general circulation of Dr. Green's works on 'Diseases of the Air Passages,' and on 'Croup,' the treatment of these diseases, according to the plan recommended in those books, has become an important item in private practice. To those physicians who have adopted this practice, it is a desideratum to have instruments which are *portable*, and at the same time adapted to the performance of those delicate operations often necessary to insure success.

"For some years past I have been using a number of instruments, contrived by myself, and manufactured by an ingenious cutler in Albany, which combine qualities quite desirable to a general practitioner.

"One is a port-caustic, made of silver or platina, and attached to a curved whalebone rod,—for the purpose of cauterizing ulcers upon the epiglottis and other parts of the throat.

"Besides this, there is a *set* of five or six instruments, for holding both sponge and caustic, made of steel wire, all attached to the same handle by a screw, and removable at pleasure.

"The sponge-holder is made of small steel wire, with a long slit at the end to receive the sponge, the inner face of the slit being made rough, with a flat ring to slide down and hold it firm, the other end being adjusted to an ivory handle. There are three of these sponge-holders, one straight, the others curved.

"The two caustic-holders are similarly constructed—with a slight difference at the slit end—and adjusted to the same handle.

"The whole apparatus is simple, safe, cleanly, and portable."—*American Medical Monthly.*

Dr. Marshall Hall.—This distinguished *savant* was in New Orleans during the month of January, and, with that zeal in the pursuit of information upon the functions of the nervous system, for which he is distinguished, made a series of experiments upon alligators. As they have been supposed to manifest some phenomena discordant with his theories, we give below the notes taken at his vivisection, believing that our readers will be interested in them. We learn that from New Orleans Dr. Hall will go to Havana, and thence return to this city.

Dissection of a small Alligator by Dr. M. Hall.—Jan. 13. Animal decapitated below the medulla oblongata, thorax and abdomen completely eviscerated. Spontaneous motion evident in the head; suspended in the trunk and extremities. Extremities excited, much irregular motion.

Head excited, much muscular motion thereof. Cornea touched, palpabræ closed. Motion of head upon touching medulla-oblongata. Nostril touched, mouth opens, and all the muscles of the head contract.

Trunk first suspended by a hook, then placed under the edge of a knife—no after motion preceptible. The trunk suspended by hooks introduced near the sphincter ani, remained perfectly motionless for several minutes.

Trunk divided into three parts. Upon irritating the skin of either of the three, *violent contractions.* Superior points of amputation of each being irritated, little or no motion. The upper part of spinal marrow of each portion being irritated, muscles below contact.

The experiments showed *spontaneous* and *excited* motion in the head; *excited* motions only, in the extremities.—*Ibid.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, APRIL, 1854.

"SCHIEDAM SCHNAPPS." Our readers will recollect that in our February No. we gently reminded some of our brethren of a slight professional delinquency in allowing themselves to be over-reached by Udolpho Wolfe and his Schiedam Schnapps. We did this in the best natured manner possible, and without a thought whether we should add to or lessen the sale of this celebrated medicine. But it seems our noticing the article at all opened a door to a new mode of advertising, and in the N. H. Patriot of Feb. 22d, this prince of all the rumsellers came out with an advertisement of great length, in which we, as well as those of our brethren from whom we copied, were assailed with a tirade of *misrepresentation and abuse,* which could only have been produced by a brain familiar with *gin of some sort.*

We regard his abuse as more desirable than his favor, and either of equal value with the testimony of those *very eminent medical men* who have spoken *so very favorably* of the "Schnapps;"—but, as he seems to regard "medical testimony" *as proof positive,* we cannot forego the temptation to put on record *our opinion,* and it is this,—that while we do not doubt that the "Schiedam Aromatic Schnapps" is very good gin, we believe that *equally good gin* for medicinal purposes may be procured of respectable druggists in Concord, Manchester or Boston, *for one half the price.* We say this advisedly, and with a full appreciation of the value of the "Schnapps," with which we are sufficiently acquainted, although we did not see fit to accept a bottle when offered "free, gratis, for nothing."

A TREATISE ON VENEREAL DISEASES. BY A. VIDAL, (DE CASSIS,) *Surgeon of the Venereal Hospital of Paris, &c. With colored plates. Translated and edited by* GEO. C. BLACKMAN, M. D. *New-York: Samuel S. & William Wood, pp.* 499. Without professing to be posted up in all the quibbles and quirks of modern syphilography, or to decide who is nearest right, VIDAL or RICORD, we must say we have never seen a book on this subject which appeared so well calculated to meet the wants of students and young practitioners as this. The whole subject of venereal disease and its treatment is discussed at length, but in a clear and concise manner. The American editor has discharged his duty faithfully and creditably, and the work is remarkably free from the stiffness so common in translations from the French. It is illustrated with numerous plates, colored to life, which are invaluable to those physicians who have not had opportunity to see the various forms of primary and consecutive syphilis as they occur in the hospitals of large cities.

TRANSACTIONS OF THE AMERICAN MEDICAL ASSOCIATION. We have received the sixth volume, and must here express the satisfaction we have felt in its examination, although we have not now time nor space to notice its merits as we would. The essays of Prof. Meigs "On Acute and Chronic Diseases of the Neck of the Uterus;"—of Prof. March, "On Coxalgia, or Hip Disease;"—of Dr. Buck, "On the Treatment of Morbid Growths within the Larynx,"—or either of the prize essays, are each worth more to any practitioner than the cost of the book. We regard this volume as one of the best, if not the *very best*, medical book ever issued from the American press. Prof. Meigs' essay is illustrated by many plates colored to life.

We are also glad to inform those of our readers who may wish to procure this volume, that they can do so by remitting post-paid three dollars to Dr. Francis Minot, No. 140, Charles Street, Boston, when a copy will be forwarded, by express or otherwise, as they may direct.

PROF. FLINT'S CLINICAL REPORTS.

CLINICAL REPORT ON DYSENTERY: *Based on an Analysis of Forty-nine Cases, with remarks on the Causation, Pathology and Management of the Disease.* BY AUSTIN FLINT, M. D., *pp.* 90.

CLINICAL REPORT ON CHRONIC PLEURISY: *Based on an Analysis of Forty-seven Cases.* BY AUSTIN FLINT, M. D., *pp.* 58. These reports are such records of the actual phenomena of disease, based on "facts and figures," as are worth whole libraries of closet speculations. They remind the reader of Andrall's celebrated "Clinique Médicale," but have the advantage over that work that they are records of the results of diseases as they occur in our midst, and as treated by one of our own physicians, and as such are entitled to a degree of confidence which no foreign work can claim.

These little books are published in Buffalo and Louisville, Ky., but we presume may be ordered of our own booksellers.

FUNCTIONAL AND SYMPATHETIC AFFECTIONS OF THE HEART: *A paper read before the Society of Statistical Medicine.* BY JOHN W. CORSON, M. D. This is a reprint from the January No. of the New-York Journal of Medicine, extending to 31 pages, and embracing much valuable matter in relation to heart diseases. In relation to the relative frequency of organic and functional diseases, Dr. C. says:—"The counterfeits, indeed, are as plenty as the real coin. Perhaps no man ever saw more of heart disease than the late Dr. Hope, and we have the deliberate testimony in his work, that one half of the private cases were merely functional. We may sincerely endorse this statement, and add that these average the most mental suffering." No brief extract can do justice to Dr. C., but we cannot forbear to copy the following: "The enthusiastic student, fresh from the beautiful theories of books, and with all its hard names ready on his tongue, is doomed to bitter disappointment, if he imagine that, without long and severe training, his uneducated senses can at the bedside accurately weigh and measure a living heart as it flutters in the bosom, or truly estimate its false alarms, its throbbings and heavings, and its moanings."

PSYCHOMANCY;—*Spirit-Rappings and Table-Tippings Exposed: By Prof.* CHARLES G. PAGE, M. D., *etc. Published by D. Appleton & Co., New-York, pp.* 96. This is a very clear and philosophical exposition of the fallacy of these modern humbugs, which are having such melancholy prevalence at the present time. Prof. PAGE applied mechanical tests to detect these impositions in February, 1853,—"several months in advance of Faraday's tests,"—and claims this as the *first* expose of "rappings and tippings."

We commend it to any of our readers who are interested in this matter. As a specimen of the opinion of Prof. P., we copy the following from the first page:—"With a confidence, firm as our belief in holy writ and the unfailing laws of God, we challenge the exhibition to our senses of any performance with spirit-rappings or table-tippings, which cannot be explained upon natural, and *well known* natural laws."

"DOCTORS COMMONS." *An Ethic Address delivered before the Burlington County District Medical Society, (New-Jersey.)* By S. W. Butler, M. D., *President of the Society.* This address is "short and sweet," but is a genuine *multum in parvo.* Dr. B. knows the whys of professional delinquency, and tells his mind without reserve. The following is very like something we have written on the same subject:—"Witness, too, our courts of law, when, in suits brought against surgeons for mal-practice,—which in nine cases out of ten have their origin in cupidity and spite,—professional men are found, who, with a view to advancing their own interests at the expense of a successful and rival practitioner, are base enough to give questionable evidence against him, which, in the minds of most juries, will out-weigh any amount of knowledge and talent which may be brought forward by the defendant."

STRAFFORD DISTRICT MEDICAL SOCIETY. We have long regarded this and the DOVER MEDICAL ASSOCIATION, comprising mainly the same members, as pattern societies. They are noble exceptions to the proverbial quarrelsomeness of neighboring physicians; and we are happy to know that they reap the reward of their fraternal regard for each other, in individual and associated prosperity. We give in another page the proceedings of their last annual meeting, which show that they are all fully alive. The labors and example of Gov. Martin have done much to produce the present happy condition of medical matters in Strafford county.

STATE SOCIETY COMMITTEE ON PRACTITIONERS WITHIN THE STATE. At the annual meeting of the N. H. Medical Society, holden at Concord, May 31 and June 1, 1853, Prof. E. R. Peaslee offered the following resolution which was unanimously adopted:

"*Resolved,* That a committee be appointed, consisting of one member from each medical district in this State, whose duty it shall be to obtain the names of all the medical practitioners within their respective districts, and ascertain at what medical schools all the *irregular* as well as the *regular* practitioners obtained their diplomas;—the facts thus obtained to be published at such time and in such manner as the committee may decide upon."

The following gentlemen were appointed a committee under the foregoing resolution:

For Grafton District,	Dr. A. Smalley,	Lyme.
" Centre "	" E. H. Parker,	Concord.
" Southern "	" F. P. Fitch,	Amherst.
" Rockingham "	" E. L. Griffin,	Derry.
" Western "	" G. B. Twitchell,	Keene.
" Strafford "	" P. A. Stackpole,	Dover.
" Carroll "	" W. H. H. Mason,	Moultonborough.
" Manchester City,	" Josiah Crosby,	Manchester.

In compliance with the invitation of the chairman of the committee, Dr. A. Smalley, we will act as far as practicable instead of Dr. Parker; and we would suggest that those of our subscribers who feel any interest in this matter, should forward, (*post-paid,*) to some member of the committee, all the information in their possession, not only in relation to practitioners in their own towns, but, so far as their knowledge extends, throughout the State.

In this way only can we arrive at an approximate knowledge of what sort of Doctors we have among us. It will perhaps be as well for information to be sent as follows: Grafton and Coös counties, to Dr. A. Smalley, Lyme; Hillsborough, to Dr. F. P. Fitch, Amherst; Rockingham, to Dr. E. L. Griffin, Derry; Cheshire and Sullivan, to Dr. Geo. B. Twitchell, Keene; Strafford, to Dr. P. A. Stackpole, Dover; Belknap and Carroll, to Dr. Mason, Moultonborough; Merrimack county, to the editor of this journal. Dr. J. Crosby will collect the information in Manchester city.

It is hoped our brethren will take hold of this matter and give us all the information in their power, and without delay.

EVILS OF TOBACCO: *as they affect Body, Mind and Morals.* By Rev. DWIGHT BALDWIN, *pp.* 16.

TOBACCO DISEASES: *With a Remedy for the Habit.* By JOEL SHEW, M. D., *pp.* 20.

TOBACCO: *Its History, Nature and Effects, with Facts and Figures for Tobacco Users.* By R. T. TRALL, M. D., *pp.* 22.

Published by Fowlers & Wells, New-York.

These three tracts are among the best books issued by these enterprising publishers. They are *quids,* which the lovers of the filthy weed can neither get around, move out of their way, nor chew up. The "*facts and figures*" will be as unpalatable to them as a plug of *mouldy pigtail;* but we advise every tobacco user, especially our medical brethren, to procure and read these little books, and, having done so, to apply the remedy recommended by Dr. SHEW, which we will warrant to effect a cure for their accursed habit.

TO NEW-HAMPSHIRE PHYSICIANS. As the extensive prevalence of small pox renders the present, perhaps, as favorable a time as ever may occur, to ask for the action of our Legislature in relation to compulsory vaccination, we would request such of our New-Hampshire subscribers as wish to aid in this matter, to prepare petitions to that effect, secure the signatures of as many of their townsmen as they conveniently may, and transmit them to us at as early a day as possible. These petitions need be only a short and comprehensive request to the Legislature to take such measures as their wisdom may direct, to restrain the (at present) fearful prevalence of small pox. We hope every humane physician will feel himself called upon to do his duty in this matter, and being called will on no account "begin to make excuse," but do his full share in this effort to restrain a fearful pestilence.

THE

NEW-HAMPSHIRE

JOURNAL OF MEDICINE.

Vol. IV. MAY, 1854. No. 5.

[For the N. H. Journal of Medicine.]

RECTO VAGINAL FISTULA.

Mr. Editor :—In compliance with your request I have prepared the following account of a successful method of treating recto-vaginal fistula and lacerations of the recto-vaginal septum, deeming it incompatable with the limits of a communication like this to enter into any particular description of the anatomy of these parts, a detailed account of the disease, or the operations which have been proposed for its relief.

A communication between the vagina and rectum sufficiently large to allow the rectum to discharge its contents partially or wholly into the vagina, is a great source of disgust, disquiet, and unhappiness; and affords a painful subject for discussion, from the fact that the operations devised for its cure unfortunately have been attended with no very satisfactory results.

This frightful accident is usually the effect of tedious labor, either by the impacted fœtal head pressing the vaginal parietes against the sacrum to such a degree and for such length of time, as to cause sloughing of the recto-vaginal septum, by a direct laceration of that part to a greater or less extent by the fœtal head, or by incautious and awkward instrumental delivery.

However caused, this distressing malady is studied with the deepest interest by the physician and surgeon, as well as the obstetric practitioner; and although this accident may seldom prove fatal, still its deplorable consequences on the keen sensibilities of delicate women are horrid in the extreme.

The diagnosis in such a case is perfectly plain. The want of power to control flatus and fæcal discharges, and their appearances in the vagina, at once point to the nature of the malady. But to determine the extent, size, and position of the artificial opening requires a thorough examination with a speculum.

The chief difficulty encountered in the treatment of this accident consists in the deleterious influence of the leucorrhœal discharges, which are almost always observed, on the one side, and the secretions and contents of the rectum on the other, both of which offer obstacles to union by first or second intention. In addition to these, the deep seated position of the parts, the narrowness of the vagina, together with the *absolute* necessity of freshening the *entire edges* of the opening, render it quite impossible for the surgeon to prepare, with the instruments in common use, the walls of the laceration or perforation with *smooth and evenly incised edges.* And could this be done, to bring them in *absolute contact* by interrupted sutures, lead, wires, &c. introduced, as instructed by authors, is attended with scarcely less inconvenience. In my humble judgment, failing to secure *smoothly incised edges* and an *accurate, absolute contact,* has been *the* cause of the almost total failure in attempting to effect union by the first intention: the only reason why (as M. Velpeau says) " the organism does not respond to the wishes of the surgeon, and persists in spite of the best directed medical treatment."

Where smoothly incised edges are put in *exact contact,* the union is not affected in the least by the secretions of either side.

With the view of rendering the freshening of the edges of the fistula smooth, and the introduction of sutures easy and perfect, I have invented several instruments, to be used and varied according to the extent and direction of the perforation, or opening.

As the anatomy of the parts and a knowledge of the various causes of the accident can be acquired elsewhere, I will proceed at once to give some account of my method of operating, and the instruments to be used; and as the operation for a fistulous opening or laceration is mainly the same, I will commence with the *longitudinal laceration.*

Having previously prepared the patient by the use of gentle laxatives, (sufficiently active, however, to keep the bowels in a soluble condition for several days,) a full dose of opium should be given, the parts well cleansed and washed with some slight astringent. The operation may be commenced by placing the patient in the position for lithotomy, exposed to a strong light; the Speculum Recti (see cut,) is introduced through the anus into the rectum with its ununited edges looking toward the vagina. It will be seen that this instrument is a bi-valve, or finestral speculum, so constructed as to be capable of being fixed by a graduating arc and screw at any degree of lateral extension.

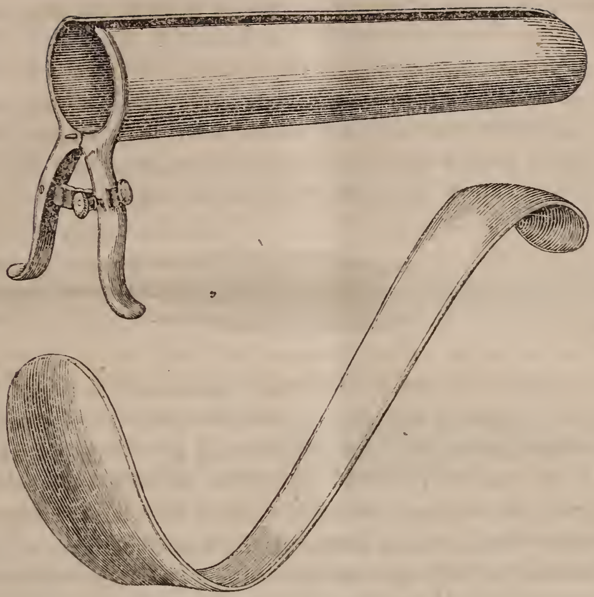

FIG. 1.

FIG. 2.

The single blade vaginal speculum, Fig. 2, is next introduced into the vagina with its handle resting against the pubis. This being held by an assistant, who at the same time extends the labia on either side, the recto-vaginal septum is exposed to view, and the operator is able to judge of the extent to which the blades of the speculum recti should be opened. When these instruments are properly fixed and the perineum drawn a little down or forward, the fistula of laceration is brought *plainly* to view. Extension and counter-extension is then made upon the walls of the laceration, by passing the instrument fig. 3, (which describes itself) through the speculum recti to the posterior extremity of the opening, fixing its concave end at the angle, the handle being held between the second and third fingers of the left hand. This is pushed forward, while extension is made by the left index finger, or a blunt hook passed behind the perineum when that part is not torn away, and by rat-toothed forceps where perineal laceration exists.

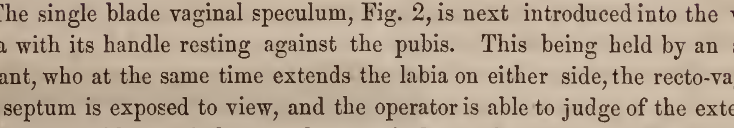

FIG. 3.

The edges of the opening being thus put upon a firm stretch, and removed by means of a small, lance-pointed, double-edged blade, connected somewhat in the form of a tenaculum to a shank four or five inches long, terminated by a straight handle (fig. 4,) which is to be passed along the speculum recti to the posterior angle of the laceration, when it is made to perforate the recto-vaginal septum two lines from the edge, and close to the counter-extender. A slight up and down motion is then given to the knife, while it is drawn carefully forward to the anterior angle of the opening, dividing merely the rounded edge, which need not be separated at either extremity until the cutting is done on the opposite side, when the angles can be divided and the divided part taken out entire, provided the knife is very thin and of a proper width, say three lines.

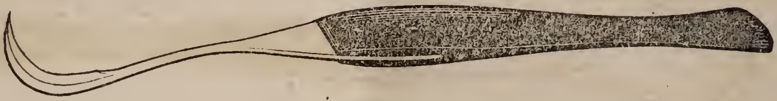

FIG. 4.

Where the fistulous opening is round, the knife should be passed through the recto-vaginal septum at such distance from the posterior edge as may be necessary to form sufficiently acute angles, and give it the "button-hole" shape. In such a case the posterior wall of the opening should be held by a common tenaculum while a perforation is made, when the counter-extender is to be placed in the same manner, and the freshening done as described above. A knowledge of the anatomical structure of the recto-vaginal septum will at once point to the necessity of firm extension, in order to prevent the part from yielding to the pressure and force of the knife.

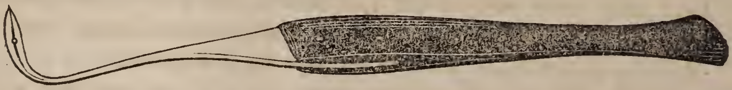

FIG. 5.

After accomplishing this first step of the operation, which may be properly regarded the most difficult, and on which its success mainly depends, the edges, after all bleeding has ceased, (and it will be well to notice here that during the operation the surgeon is not annoyed by the considerable bleeding which always attends it, as the blood drops directly into the speculum recti, and can be washed or wiped away with great facility,) are to be approximated by interrupted sutures introduced by the needle, (figure 5) which, being armed with a waxed ligature, is passed along the speculum recti, its curve resting on the bottom. The speculum recti should be so adjusted as to allow the needle to be inserted full one quarter of an inch from the edge of the opening. The first suture should be introduced quite near the posterior angle, the parts being kept tense, as when the freshening was done. It will not be found necessary to use forceps to confine the part through which the needle is passing, if the walls are drawn sufficiently tense by the extension described above. After being pushed through the septum, the needle is relieved of its thread by long pointed forceps, or a tenaculum, and withdrawn to be armed again and used in the same manner on the opposite side, taking special care that it is introduced precisely opposite the former and at an equal distance from the edge. All additional sutures are to be introduced in the same manner, and secured by a knot made with forceps, or the "lead bead."

It sometimes happens when a laceration is caused by labor, that, on reaching the sphincter ani the rent takes a lateral or transverse direction. In such a case the operation must be terminated as in transverse fistula, where the knife edges and needle eye are turned half round in the instruments to be used, as in figures 6 and 7.

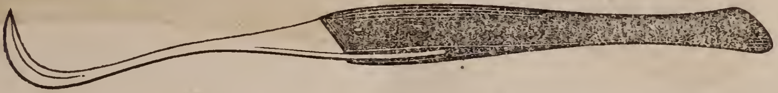

FIG. 6.

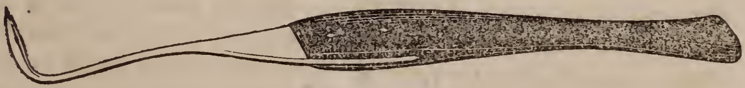

FIG. 7.

Even where the transverse laceration is extensive, the transverse knife can be easily used by rolling the speculum from side to side, as the knife advances. I have not deemed it necessary to give any description of the knives or needles, as the cuts show for themselves; but it will be well to have their curve such as will pass with a little play in the speculum recti when its blades are closed, as the septem will depend slightly over the edge of the speculum blade, when the sutures are introduced.

A laceration, or fistulous opening, treated as I have described, will not be effected in the least by leucorrhœal or other secretions, when well done, as the edges, when smoothly incised and in exact contact, and smeared as they will be with plastic lymph, will be entirely impervious to them, as the cases where I have used this method and these instruments fully demonstrate.

I will report the most important facts of one case. Mrs. ———, at the age of forty-one, was delivered of her first child, some two years since. A few days after her confinement, her physician made the astounding discovery that her uncommon severe labor had produced a laceration of the recto-vaginal septum, extending longitudinally from the perineum upward over three inches. Every precaution was taken immediately, by regulating the bowels, keeping the parts clean, and the patient quiet; but not the slightest improvement was made in the size of the opening. The *entire* discharges from the bowels passed through the vagina.

I operated a few months since, assisted by Dr. F. B. Ayer, using the method and instruments described in this brief communication. The patient was suffering at the time from uterine and vaginal leucorrhœa; and to add to this unfavorable circumstance, a catamenial discharge made its appearance in eight hours after the operation was performed; but notwithstanding all this, the parts united save a small opening near the sphincter ani, where a portion of the septum was much thinned down and removed by ulceration. Granulations were kept alive by the application of nitrate of silver until the fistula closed. The bowels were not moved for ten days, and then only once a week during the application of the nitrate. I do not apply the caustic in such cases oftener than once a week, a s a more frequent use will defeat the object aimed at by destroying the delicate and but imperfectly formed granulations.

Respectfully yours,

G. W. Garland.

Meredith Bridge, April, 1854.

CASES OF ANEURISM.

BY W. H. H. RICHARDSON, M. D.

[Communicated for the N. H. Journal of Medicine.]

Popliteal Aneurism: John Morgan, born in Ireland, aged 30, a strong, healthy, man and temperate in habits, first sought medical aid on the 1st of January.

History of Case:—Carpenter by trade. While at work about twelve months since, the scaffolding on which he was standing gave way and he fell to the ground, striking the left leg over the popliteal space, upon an upright piece of timber. Shortly after a swelling commenced at the seat of injury, which grew large and painful, but under treatment it subsided in 8 or 10 days, leaving a small, hard tumor, which has since remained slowly increasing in size. The tumor was about the size of a large walnut, nearly globular in shape, and of a very firm feel; strong pulsations could be felt when the fingers were passed upon it, and these pulsations were synchronous with the pulsations of the heart, and cease when firm pressure is made upon the femoral artery, but the tumor does not sensibly diminish in size. Upon applying the ear, a faint aneurismal thrill could be heard, but this ceased with the pulsations. Both returned when pressure was removed.

Diagnosis:—Popliteal aneurism caused by the rupture of the internal and middle coats of the artery. On the 23d of January, commenced treatment, by compression of the femoral artery, using alternately Dupuytren's instrument and the thumb. Patient was able to bear compression by the instrument, 25 minutes the first time, 30 the 2d and 35 the 3d: the thumb being used in the intervals, which varied from 15 min. to half an hour. Very soon after the instrument was applied, the temperature of the limb fell two or three degrees, but in the course of three or four hours the natural temperature was restored.

Jan. 24*th.* Compression has been kept up constantly since yesterday. Patient is able to bear the instrument 30 min. this morning without much pain. No pulsation felt in the tumor since half past three this morning. Treatment is borne well and no untoward symptoms have appeared.

Jan. 25*th.* Treatment continued; pain in the back during the previous night, with restlessness; pulse 63, moderately full; tongue clean; functions regularly performed; took $\frac{1}{6}$ grain of morphine and slept 3 hours. The instrument is allowed to remain on one hour without inconvenience; no pulsation in tumor.

Jan. 26*th.* Treatment still continued; pressure moderated so that the patient is able to bear the instrument 3 hours without pain. Leg slightly swollen; temperature natural. A branch of one of the internal articular arteries can be felt very distinctly, pulsating upon the inside of the knee. This is enlarged to the size of the radial artery, or larger. No pulsation has been felt in either the anterior or posterior tibial artery since the treatment was commenced.

Jan. 27*th.* No change of consequence since yesterday; slight compression borne six hours without pain; leg not much swollen; small branches of arteries felt pulsating on both sides of the tumor.

28*th.* No particular change since yesterday.

29*th.* Doing well.

30*th.* Same.

Feb. 20*th.* Aneurism pronounced cured. No pulsations; tumor somewhat diminished in size.

Aneurism of the Descending Aorta:—Nicholas Brookman, aged 36, German; shoe-maker, sought medical advice, April 13th. He was of temperate habits and a robust constitution. Complained of pain in the left side of the thorax. The respiratory murmur was weak on the right side, but no abnormal sound could be heard. Chest resonant throughout, but resonance greatest in the right infra clavicular. Pulse 76, strong;—countenance anxious; appetite good.

On the evening of this day, for the first time, the patient was seized with great dyspnœa, almost amounting to suffocation; at the same time a tumor formed over the whole anterior aspect of the neck, but did not wholly prevent the passage of air through the trachea.

On examination, the right side of the chest was found unusually resonant, and no vesicular murmur could be heard. Bronchial respiration audible; a pulsation beneath the right clavicle distinctly felt; respiratory murmur of left side abnormally loud. Action of the heart very feeble; pulse scarcely perceptible; respiration, ten per minute, laborious and gasping. This paroxysm lasted 15 minutes;—decubitus on the left side; could not lie on the right.

Patient took ten grains of Dover's powder and rested one hour; was then seized with a similar paroxysm, which lasted 10 or 15 minutes;—he rested two or three hours during the night, and next day appeared comfortable.

On the 15th, at 12, M., the patient was seized with similar paroxysm, and died immediately.

Autopsy, one hour after death.—A few pleuritic adhesions existed upon both sides of the chest:—The right pleural cavity contained 25 ounces of bloody serum and 20 ounces of clots of blood. At the summit of the chest the costal pleura was dissected from the ribs, forming a sack nearly as large as the heart:—right lung collapsed. On opening the neck the tumor was found to be composed of extravasated blood, situated beneath the deep seated fasciæ. Heart and pericardium healthy;—lungs healthy.

The descending aorta opposite the base of the heart was distended into an aneurismal sack, and the bodies of the 3d and 4th dorsal vertebræ were affected by necrosis.

The aneurism probably burst on the 13th, the night on which the first paroxysm occurred.

The blood passed up the mediastinum, and, dissecting the costal pleura from the ribs, escaped into the loose cellular tissue of the neck, causing the tumor.

MEMOIR OF DR. JOSEPH NICHOLS.

[From the Boston Medical & Surgical Journal, by request of the author.]

Dr. Nichols died of pulmonary consumption, on the 18th of May, 1853, at his residence in Springfield, N. H. He was born in the same town the 24th of Dec., 1796. Like many of New-Hampshire's ablest practitioners, he has left no record of the struggles or the numerous obstacles he had to encounter in his progress up the "hill of science;" and, what is a greater loss to those who are striving to attain the same eminence in professional skill and usefulness, has left no written summary, either as a guide or synopsis of his vast amount of experience.

The following sketch is drawn from personal observation, and it was gathered from him while a student in his office, and in my professional intercourse with him since my pupilage. His elementary and professional education was limited to his own efforts; yet, by the most rigid economy and persevering industry, he obtained what was then considered, a "good English education." He commenced the study of medicine in the office of Dr.

Graves, of Deerfield, N. H., completing his course at Dartmouth Med. College, under the tutorship of Prof. Mussey. In 1820, Dr. Nichols began the practice of medicine in Springfield, among his friends and neighbors, and there continued to practice so long as he was able to ride. A mind of peculiar mould, of superior native strength, intuitively discriminating, and of a commanding turn, at once fitted him for that position in society which he afterwards so eminently maintained, both as a physician and townsman.

Industry was a leading trait in his character. He took an active part in every thing pertaining to the general welfare of the town, and the prosperity of his fellow citizens. Possessed of strong and vigorous intellectual powers, always active and always acting upon a fixed purpose, he accomplished a large amount of intellectual and physical labor.

The superintending of his farming interests; attending to calls at the office, visiting the sick in and out of town, doing business as town officer and justice of the peace, constituted his daily routine of mental and physical labor for over thirty years. His great variety of business talent enabled him to accomplish what, to men of one "ideaism," seemed impracticable if not impossible. Being a justice of the peace nearly as long as he was a practitioner of medicine, there being no "limb of the law" in town, he was constantly being called upon to make out legal papers, and frequently to act as judge and advocate. The writer has known him employed as legal counsel, and though opposed by the able lawyers of Sullivan, Grafton and Merrimack counties, to act with success and win laurels of credit, for his legal acumen, the acuteness of his perceptive faculties, and his general intelligence. As a justice of the peace, member of the State Legislature, and town officer, he was indefatigable in his efforts for the administration of justice and for the interests and welfare of those whose servant he was. In a word, the great "motive power" that raised him from obscurity and poverty, to a noted respectibility and usefulness, was his untiring energy and industry, directed by a shrewd sagacity that marked all his movements. But around his medical career hovers the brightest halo, the effulgence of which, like the western sky at sunset, is now rendered more glorious by the reflection that lingers behind. In this sphere his usefulness was more generally known, and had the most lively appreciations. In him the sick recognized a superior mind, keenly alive to their wants. Kind and sympathizing in his manner, bland and persuasive generally, yet sometimes stern, and even blunt in expression; controlling the sympathies, anxieties and hopes of his patients, the confidence of the community was secured to him, and his success rendered signally triumphant. At the sick bed he was calm and peculiarly self-possessed; discriminating in his diagnosis, vigilant in watching the development and progress of disease; and by that "intuitive tact," known only to those who possess it, he often foresaw and avoided those unfavorable symptoms which too frequently go on to a fatal crisis. He studied his cases with great care, both by observation and reflection; and in peculiar and anomalous freaks of nature's morbid operations, his well selected and extensive medical library was searched for its information and counsel in the mysteries of the "healing art." Though Dr. Nichols' earlier professional education might be considered limited, yet his persevering industry, coupled with the constant habit of comparing his cases with those on record, aided by a strong and retentive memory, made him, what he really was, a well read physician.

As a consulting physician, he was punctual, constant and honorable. Of a scientific turn of mind, he gave no countenance to quackery, either in or out of the profession, but was not an admirer of that squeamish nicety, which is said to be more "nice than wise," and which aids quackery more than science. Among his professional brethren he was popular and respected, both for his gentlemanly bearing and professional attainments. Naturally facetious, and possessing a large fund of humorous and instructive anecdotes, the good will of all classes was secured to him. This, combined with superior ability and a good share of practical acumen, made him at once a successful and popular man. Dr. Nichols wrote much as a business man, but little as an author. His leisure moments, and much of the time when "nature's sweet restorer" should have been his only companion, were occupied with his non-professional duties. His extensive field of practice, together with his frequent consultations, calls into neighboring towns and counties, gave him but little quiet and repose. Many a time has the writer taken the reins from his powerless hands, driving gently for miles, that the sweet repose which "tired nature" sought from "balmy sleep" might not be interrupted. An asthmatic diathesis, constant labor and exposure in the severe of our climate, early developed a disposition to pulmonary disease. For years his "lung difficulty," as he called it, harassed him more or less, and for the last three or four years he was often confined during the coldest weather. During this period his wasted frame and apparent premature old age, proved a lamentably true index to the sequel. He died comparatively young, in the midst of his usefulness, and in the vigor of his manhood, aged 54 years, 4 months, and 24 days. M. C. HOYT.

Bristol, N. H., Feb. 14, 1854.

OBSTETRIC MEMORANDA.

BY B. FORDYCE BARKER, M. D.

On the Induction of Premature Labor.

The propriety of exciting the gravid uterus to prematurely expel its contents, is at the present day no longer questioned in those cases where the life of the mother is jeopardized by the continuance of the function of gestation, and in certain cases where there is a chance of preserving the life of the fœtus by so doing, which would be impossible, from mechanical causes, at full term. The methods by which this has been effected are, puncturing the membranes, separating the membranes from the os and cervix uteri, dilatation of the os uteri by sponge tents, and the administration of ergot.

In the January No. of the "Medical Times and Gazette," Dr. Francis H. Ramsbotham, of London, gives a table of fifty-five cases in which the ergot was given for this purpose, and another of thirty-six where labor was induced by puncturing the membranes. Dr. R. believes that no means yet devised is of such easy application and is liable to so few objections, as the use of ergot. But we believe that an analysis of his tables will hardly lead to the same conclusions in the minds of others. That ergot will induce uterine action, is, however, clearly established. But in some cases it was necessary to repeat it in full doses very many times, before any effect was produced. Many of the patients took more than twenty full doses, at intervals of four or six hours, before the effect was obtained. One took forty-eight and another sixty doses. In eight cases, the ergot failed to exert its specific influence on the uterus. The table also demonstrates that the ergot in some instances has a prejudicial influence on the fœtus in utero. Of the thirty-three children born alive, five died in convulsions speedily after birth. In many of the twenty-two cases of still-births, the mothers declared that they were quite sensible of the moment when the fœtus within them ceased to exist. Dr. R. believes it is a universal principle, that whenever it fails to produce uterine contractions, it is equally innocent of any deleterious effects on the economy of the fœtus.

Professor Kiwisch, of Wurzburg, proposed the use of the warm uterine douche. A gallon or two of warm water of a temperature from 96° to 116° is injected continuously upon the os uteri, twice a day. In some cases two or three douches suffice to induce actual labor pains. In other cases, where the excitability is less, six or eight douches were required. Dr. Tyler Smith has reported a case in which he successfully resorted to the alternation of the hot and cold douche, by means of a syphon. I have had occasion to recommend the premature excitement of uterine contraction in three cases. In one case at the twenty-second week, on account of the excessive and constant nausea and vomiting; in the second case, at the fourth month, from the intense suffering and danger resulting from the development of the uterus chronically inflamed; and in the third, at the thirtieth week. This patient had complete amaurosis, succeeding eclampsia. When I saw her she had been perfectly blind for a week. The urine was deficient in quantity, and highly albuminous, and she was extremely anæmic. In these cases the injection of a large quantity of cold water into the vagina, repeated every three or four hours, was sufficient to induce uterine contractions. In one case, labor came on the second day, (they were allowed to rest undisturbed during the night;) in the other two, it came on the third day. Scandoni, of Wurzburg, has induced premature labor by irritating the nerves of the mammary glands, by means of the breast-pump.

In the Nashville Journal of Medicine and Surgery, Dr. Washington asserts that dry cupping, applied to the lowest part of the sacrum, produces dilatation of the os uteri, and applied higher up, contraction of the uterus. In a case where the pains had endured fourteen hours, without producing any perceptible effect, in consequence of rigidity of the os uteri, Dr. Washington applied a dry cup as low down on the sacrum as possible, so as to cover the origin of the nerves to the os uteri. Complete relaxation ensued; at the next pain, the head descended to the outlet, and with the second pain the patient was safely delivered, and that in less than ten minutes from the application of the cups. We are not aware that this method has ever been tried for the induction of premature labor. In conclusion, I should say that as a rule of practice, the douche should be preferred in those cases, 1st, where the operation is necessary in the early months, on account of excessive vomiting, occurring to such an extent as to threaten life by starvation and debility; 2, in those cases where the operation is necessary in the latter months, in order to save the child, on account of some mechanical obstacle to delivery at the full term. But in those cases where the operation is necessary in the latter months, in order to save the life of the mother, on account of dangerous oppression of the circulation or respiration, or excessive vomiting, or draining hæmorrhage from partial separation of the placenta, or from insanity or convulsions, puncturing the membranes is to be preferred, as the evacuation of the liquor amnii frequently affords immediate relief. The only objection which has been urged against the douche as a means of inducing premature labor, is the facility, certainty, and safety with which it could be made use of for criminal purposes, were it generally known to the public.

Prof. Simpson has published a very interesting paper on "*Morbid deficiency and morbid excess in the involution of the uterus after delivery.*" The physiological development of the uterus during the nine short months of pregnancy is forcibly stated in the following language: "During the forty weeks of utero-gestation, the uterus enlarges from nearly 3 inches in length and 1¾ of an inch in breadth, to 12 or 15 inches in length and 9 or 10 inches in breadth. It increases from about 2 ounces in weight to 25 or 30 ounces.

The cavity of the uterus before impregnation is less than one cubic inch; while at the full term of pregnancy it is extended to above 400 cubic inches; and the surface of the organ increases from about 5 or 6 square inches to nearly 350 square inches. Before impregnation, the uterine cavity would not hold above a drachm or two of fluid; at the ninth month of utero-gestation, its contents usually weigh from 120 to 150 ounces."

While forty weeks are requisite for the full development of this condition, from four to eight weeks usually suffice to decrease this organ to its normal, unimpregnated condition. Professor Retzius, of Stockholm, has found, in a series of anatomical and histological observations on this subject, that the process of absorption of the walls of the puerperal uterus is preceded, as absorption of other deposits is, by fatty transformation of its component fibres; and that the blood, during puerperal convalescence, shows under the microscope a corresponding superabundance of globules or granules of fat. But in some cases, there are various pathological derangements which retard the uterus in regaining its normal dimensions. Most practitioners must have met with cases which Prof. Simpson describes as "morbid permanence of the state of puerperal hypertrophy." But he is the first to describe an opposite condition of the uterus, following pregnancy, viz., permanent atrophy producing amenorrhæa.

Inversio uteri. In the Buffalo Medical Journal (Nov., 1853,) appended to the report of a case of this serious and alarming accident, Dr. Hunt gives an analysis of sixty-seven cases, which have been recorded. Dr. Hunt's paper is a valuable contribution, its only defect being, in our judgment, a neglect to give the sources from whence he obtained these sixty-seven cases. It has been a mooted question, whether, in those cases where the placenta is adherent, the uterus should be replaced with the placenta still attached, or whether it should be first detached, and then the uterus reduced. As Dr. Hunt remarks, the weight of authority is in favor of the former method of procedure, the argument adduced in its favor being the danger of increased hæmorrhage attendant on the removal of the after-birth. But Dr. H urges the following reasons for first detaching the placenta.

First. The attempt to return the placenta very much increases the difficulty of reposition. *Second.* When successful, it leaves a formidable difficulty to be still encountered. *Third.* It does not decrease the danger of hæmorrhage. Of these sixty-seven cases, thirteen terminatd in death. In four, death occurred *before* reposition. Three of these died from hæmorrhage, and one from nervous exhaustion with slight hæmorrhage. Four deaths occurred immediately *after* reduction. One from hæmorrhage; the placenta having been returned with the uterus. Three died from convulsions. The remaining five deaths were in chronic cases. Thirty-two of these cases were irreducible; ten of these resulted in spontaneous cure. In five of these cases, gangrene occurred, and "singularly enough, all of these cases resulted in what may be called a cure; that is, the cases recovered from this amputation by natural process, and regained a comfortable general health." Dr. Hunt found no cases which were fatal from gangrene. Five of these cases were cured by spontaneous reposition of the organ. In four cases, ligation was successfully performed. Six were "extirpated" successfully. Four cases of ligation were fatal. Of the termination of the remaining eight there is no record, except that two are quoted as in comfortable health, years after the accident.

Dr. Hunt sums up the causes of inversion, its treatment, and its terminations, in the following propositions:

"The liability to inversion decreases, but not to any marked degree, with the number of children which the woman has borne.

"That no one cause can be assigned as universal; but that the complication of a short funis with a rapid labor, the erect posture when delivered, and a large quantity of amniotic fluid, are the conditions most frequently present as causes.

"Inversion may occur without neglect or undue interference on the part of the accoucheur.

"The placenta is adherent in a large proportion of cases.

"When adherent, it should be removed prior to any attempt to reduce the inversion.

"Such removal of the placenta does not increase, but rather decreases, the risk of hæmorrhage, while it retards and renders difficult the reduction.

"Hæmorrhage does not occur to any more fatal extent than does convulsion or syncope.

"All cases in which convulsion occurred were fatal. There is little danger of metritis occurring after reduction.

"Reduction increases in difficulty with the length of time which elapses before it is attempted. Partial inversion is less easily detected, but more readily reduced, than complete.

"No operation for extirpation should be resorted to until it is evident that life is endangered.

"A sufficient number of cases occur, in which either gradual diminution in the size of the organ, or spontaneous reposition, occur, to justify and demand a delay of any operation for extirpation, until it is urgently called for by the imminent danger of the patient.

"The operation by ligature involves less danger than that by excision, and is therefore preferable to it.

"An operation is more frequently necessary in partial than complete inversion, and is at the same time less dangerous.

"Finally, under judicious local and general treatment an inverted uterus may often exist, for many years, without great loss of locomotion or of usefulness, and with a comfortable degree of general health."

In our cotemporary, the "New York Journal of Medicine," Dr. Elisha Harris, of this city, has published a capital paper on the "*Pathology of the cervix uteri in those conditions attended with leucorrhœal discharges.*" Although we could hardly endorse all the views and opinions of Dr. Harris, we could almost recommend his paper as a model for a "Report on acute and chronic diseases of the neck of the uterus." We most heartily concur with the following conclusions of his paper :

1. "Leucorrhœa is a prominent and a very constant *symptom* of local congestive and inflammatory affections of the uterine organs, especially of the os and cervix uteri, attended more or less constantly by structural lesions, and by important constitutional complications of which the local affections may be either resultant or causative.

2. "That, whatever may be the anatomico-pathological lesions, and whatever the constitutional complications in cases of leucorrhœa, the most common and the most important seat of the leucorrhœal discharge is in the highly vascular, glandular structure of the canal of the cervix uteri.

3. "That, from the extensive and all-controlling sympathetic relations of the uterine organs, it is found that any morbid changes in these organs, whether primary or secondary, re-act unfavorably, and with great certainty, upon the general health, especially upon the digestive organs and the nervous system ; and, *mutatis mutandis*, the same principle holds true of primarily unhealthy conditions of the nervous system, the digestive, etc., as causative of uterine disease.

4. "And consequently, that in the curative treatment of any affection that is complicated with any forms of uterine disease, it is undispensably necessary to attend to the constitutional relations of such disease, while it is equally important to address suitable remedial agencies directly to the local alterations or lesions of the uterine organs.

5. "That the most extensive and reliable experience of the medical profession has demonstrated the utility and essential importance of attending to the local as well as the constitutional treatment of those diseases of females attended by discharges, and that to do this properly and efficiently, the highest interests of the patient demand the appropriate use of dioptric, instrumental examinations of the seats and nature of the local lesions."

Prof. Shanks, of Memphis, has published in the "Medical Recorder" a series of excellent practical articles, "*On the Relations of Uterine and Constitutional Disorders as Cause and Effect.*" There are no salient points which we can select for extracts, but we hope to see these papers collected in a small volume. We think their usefulness should not be limited to the circulation of any Medical Journal.

In the February number of this journal, Dr. Sims relates a case of vesico-vaginal fistula, in which the fundus was retroverted, and the os tincæ was thrown forward under the arch of the pubis, opening into the cavity of the bladder. The cure was effected by closing up the fistula in the bladder with the os uteri.

Dr. Sims regarded this case as perfectly unique, at the time the article referred to was written ; but since that time he has met with another case precisely of the same character. The patient, aged forty-one years, was confined with her first child two years ago, and was in labor forty-eight hours. She was sent from the country to Dr. Mott; and, through his courtesy, the case was turned over to Dr. Sims. In presence of Dr. Mott, the operation was performed, Jan. 10th, 1854. She lay in bed fourteen days, and then got up perfectly well. Four days later, that is, eighteen days after the operation, the menses appeared. The menstrual discharge passed into the bladder mingled with the water, and passed off as bloody urine without any inconvenience at all. We had the pleasure of examining this patient, Feb. 12th, and found the fistula perfectly cured.

We regard these cases as among the most brilliant achievements of conservative surgery; and in other countries they would secure for their talented author a brilliant professional success and merited honors.—*American Medical Monthly.*

ON THE CAUSES ASSIGNED AS PRODUCING SCIATICA.

At a meeting of the Medical Society of London, Feb. 28, Mr. Hancock read a paper on Sciatica.

He alluded to the various causes assigned as producing sciatica—viz. disorder of the stomach and bowels, inflammation and disease of the sciatic nerves, syphilis, gout, obstruction and distraction of the capust coli, tumors, or accumulated fæces in the course of the nerves, effusion of fluid into the sheath of the nerve, irritation and disordered state of the kidneys, and rheumatism, either acute or sub acute; but that, from the cases which had fallen under his observation, the prevailing opinion appeared to be that sciatica depends mostly upon rheumatism—an opinion which he considered erroneous; as, having had ample opportunities of arriving at a conclusion, he felt convinced that the cause most productive of the complaint was irritation within the pelvis, either from loaded colon or cæcum, or from tumors formed within that cavity; or, as had been suggested to him by his friend and colleague, Mr. Goldsbow, by the hæmorrhoidal vein, which, forming a complicated plexus over the sacral plexus of nerves, would, when congested and engorged, cause undue pressure and irritation of the nerve; that although he would not presume to assert, in opposition to the high authorities who differed from him, that the disease never depended upon rheumatism, still he maintained that it so seldom did so, as to constitute the exception to the general rule, and not the rule itself. Mr. Hancock then enumerated some of the modes of treatment recommended, such as bleeding, cupping, calomel and opium, colchicum, quinine, carbonate of iron, Indian hemp, acupuncture, actual cautery, blisters, moxas, puncturing the limb, and introducing morphia and creosote into punctures. He did not consider the disease difficult of cure; on the contrary, he had found it readily and speedily yield to the remedies he had adopted, which consisted in thoroughly purging the patient with small doses of croton oil, combined with blue pill, henbane, and compound extract of colocynth, and removing the sensation of bruising in the course of the nerve by the sulphate of quinine, in doses of three grains thrice daily. He had commonly given croton oil, because he had found it useful and convenient, but he did not attach any specific influence to this medicine, as he had found equally good results from turpentine and castor oil, the aloetic purgatives; and he considered that any medicine acting upon the lower intestines would be of service. He did not consider local applications at all necessary, but that they were frequently injurious, by adding to the patient's sufferings. He narrated five cases which had fallen under his care, having been previously treated for rheumatism by the remedies appropriate for the affection, but without success. In one, the sciatica had existed for nearly two years; in another, for above twelve months; and in the remainder, from four to two months. The most obstinate of these was cured in three weeks, and the remainder in a fortnight—the latter period being that usually required. He could give many more cases of a similar character, but he thought those he had described were sufficient to prove the validity of his position, that in a vast majority of instances the disease did not depend upon rheumatism, but upon the causes which he had already alluded to; and he directed the attention of the Society to an interesting fact, which he had not found noticed elsewhere—namely, that sciatica almost always occurred on the right, and very seldom indeed on the left side of the body; and when it did he believed it was caused by impaction in the sigmoid flexure of the colon. In the majority of cases the affection commenced with stiffness, weight, and pain in the lumbar region, resembling lumbago. He was inclined to attach some importance to this fact, as affording a means of diagnosis between those cases depending upon loaded intestine and those resulting from tumor in the pelvis; and that where this symptom is absent, it is desirable to institute a careful examination, not only above Poupart's ligament, but in the perineum within the tuber ischii, and also by the introduction of the finger within the rectum. He had in two instances detected the existence of tumor in the pelvis by adopting these measures; and he thought this the more desirable, from the importance of avoiding irritation as much as possible in cases of this description.

Dr. Crisp asked if the sciatic nerve was affected in all the cases referred to, since the author had spoken of the disease as an affection of the leg. On receiving an affirmative answer, he expressed an opinion that, on many grounds, the disease could not arise from pressure upon the nerve. He characterized it as one of the most excruciating of all affections, and yet is oftentimes induced by a breath of air or a mental emotion. It is also induced from malarious influences, as attested by all writers, and especially by those who had practised in malarious districts; and perhaps even the author's instance in which two brothers were affected was confirmative of this statement. He thought, on anatomical grounds, that the theory could not be sustained, since the disease was not met with in those cases in which pelvic tumors and alvine obstructions were known to exist. In reference to the influence of sex, he affirmed, in opposition to the opinion of Dr. Copland, that the disease is more frequent in males; and accounted for it on the ground that they are more exposed to changes of temperature. He then referred to the remedies which had been recommended, and approved of the rapid and repeated application of the actual cautery; of heated air, as adopted by Dr. Downing; and of the endermic application of hydrochlorate of morphia to a blistered and denuded surface.

Dr. Daniell considered that the author had been illogical in assuming that, because his treatment had been beneficial in a few cases, it would relieve in all, thus inferring the universal from the particular. If the author limited himself to such forms of sciatica as are accompanied by lumbago, he (Dr. Daniell) was of opinion that the whole profession could testify to the value of purgatives in a majority of such cases. If, however, the author spoke of sciatica in general, he could affirm, with all other authorities, that it arises from many and varied causes, and calls for different plans of treatment. If a patient be subject to rheumatism, or gout, or syphilis, he thought it fair to infer that these affections would give rise to or modify the attack of sciatica. In reference to treatment, he remarked that many patients were too enfeebled to bear the action of purgatives, and would be more relieved by a tonic plan of treatment.

Mr. Clark stated that he had recently attended a robust patient in the employ of a clothier, and had treated him ineffectually by all the ordinary modes. At length, however, on the suggestion of his assistant, he had adopted Mr. Hancock's plan of treatment, and had cured his patient in three weeks. He had given four doses of croton oil, and had obtained copious evacuations. The disease affected the right leg.

Dr. Camps considered that the error into which the author had fallen—that of inferring generals from particulars—was very common in the profession. He further was of opinion that the author had begged the question when he inferred the existence of pressure from fæcal accumulation, simply from purgatives having brought away fæcal matter. Relief obtained from the action of purgatives is equally observed in rheumatism, and a variety of other diseases, in which there is no assumption of pressure from accumulation. He approved of the exhibition of purgatives, and especially of colchicum, but considered that the treatment must be varied, according to the cause of the disease. He reminded Dr. Crisp that although sciatica is a most painful affection, we cannot say that it is the most painful, since we have no means of measuring degrees of pain.

Dr. Richardson opposed the author's views, by stating that simple pressure upon a nerve does not give pain. Moreover, the pains in sciatica are commonly intermittent, and the remedies proposed by the author—viz., croton oil as well as turpentine, have equally good effects upon tic douloureux, and other affections of distant parts, as of the face.

Dr. Lankester was entirely at issue with the author, both in principle and practice. He regarded sciatica as a nervous affection, and considered, therefore, that the principle of treatment should be that applicable to the treatment of diseases of the whole nervous system. This the author had overlooked. He considered that the author had not proved his position that sciatica depends upon the pressure of fæcal matter upon the nerve; for the passage of fæcal matter after the exhibition of a purgative is no evidence that there was fæcal accumulation, much less that the pressure caused by it had induced the pain. He had also omitted to show that the disease exists in connexion with known pelvic and intestinal tumors and fæcal accumulations. He further objected to the assumption of generals from particulars, as made by the author, and believed that purgatives would be equally beneficial in the treatment of any neuralgia. This benefit he would attribute, not only to their direct action, but to the indirect one following the action of all purgatives and depressants—viz., that of increasing the effect produced by quinine, opium, and other powerful remedies. The author had also used the quinine after the purgatives, and the cure was probably due to that remedy. In reference to the author's selection of croton oil, he reminded the fellows that Dr. Allnut had recently written a work to prove the good effects of that purgative in all cases of neuralgia, and had shown that it had given relief where all other purgatives had failed. Dr. Allnut, however, was not prepared to state whether it relieves simply by its purgative action or by some general effect upon the system. He then showed that while colchicum and croton oil, and every other remedy, may fail to effect a cure, the patient will subsequently get well without any remedies whatever. He believed the disease to arise, not from one cause only, but from many causes; and stated that in the rheumatic diathesis there is a manifest tendency to sciatica and other neuralgic manifestations.

Mr. B. Childs explained that the author had probably intended to attribute the sciatica, not to pressure, but the irritation set up by the presence of scybalæ, and stated that hip-pains in cases of hip-disease and lumbar abscess were commonly relieved by injections into the rectum in the treatment of patients at the Margate Infirmary.

Mr. Gay objected to the author's deductions, but commended the practical character of the paper. The comparative infrequency of sciatica in relation to pelvic tumors and distension of the bowels, was opposed to the author's theory. Moreover, Morgagni had shown that pressure on a nerve alone will not give rise to pain. A cyst in the sheath gives no pain, so long as pressure, only is exerted, but when irritation arises, pain is produced. He, therefore, thought that irritation of the nerve must exist with or without pressure, whether the cause of the sciatica be rheumatism or obstruction of the bowels. In addition to the existence of the cause of the irritation, the nerve itself must be in a condition to be iritated. He had found great benefit from the use of cupping-glasses, with or without scarification.

Dr. **Webster**, with the previous speakers, differed from the author in opinion as to the cause of the disease, but approved of the practical remarks contained in the paper. He approved of the plan of treatment whereby purgatives, as colchicum, are first given, and then tonics administered, and the more so in malarious cases. He cautioned the fellows as to the employment of the endermic plan of treatment, by giving the particulars of a case in which the patient had symptoms of poisoning, following the application of belladonna to the denuded surface. He believed the right leg to be more frequently affected than the left, and men than women.

Dr. **O'Connor** expressed his disappointment at the paper, since the author had not limited his treatment to those cases of sciatica which accompany accumulation of fæces, but had affirmed it to be applicable to that disease in general. He also showed, that even so far, the author had been anticipated by Sir Charles Bell and Dr. Allnut. He then expressed his conviction that the disease arises from very varied general causes—as rheumatism, gout, dyspepsia, and syphilis, and will not then yield to purgatives. He commended quinine and opium, on the authority of Drs. Corrigan and Graves, and Mr. Morris; and affirmed iodide of potassium and colchicum to have relieve when purgatives and other remedies had failed. He had frequently used the hot button heated under a red heat, and passed rapidly along the course of the nerve with great advantage; and also the hot air, and hot water douche of Dr. Graves.

Mr. **Childs** had often used the button, heated to redness, without any benefit.

The **President** referred to Dr. Graves's personal experience of sciatica, and reminded the fellows that that distinguished physician had been cured of sciatica by iodide of potassium and sarsaparilla, after the failure of all other remedies had determined him to withdraw from the practice of the profession. He also remarked that he (Dr. Winslow) had been a martyr to sciatica on various occasions. He had taken it from sleeping in a damp bed at Birmingham, when on his way to hold a consultation with Sir. C. Hastings, at Droitwitch, and had tried every remedy without benefit, until he had invalided himself for three weeks at Bath, when he was restored to health by the use of galvanism in the Bath waters. In reference to the influence of pressure upon a nerve as a cause of pain, he stated that when the nerve is encysted, the acupuncturation of it has given immediate relief. M. Velpeau had cured sciatica by applying the actual cautery to the external ear.

Dr. **Daniell** stated that the treatment to which the President had attributed his cure was that ordinarily adopted at Bath.

Mr. **Potts** related the particulars of a case in which the daily application of galvanism had cured, after the author's and every other mode of treatment had failed. This he considered to be a case of pure neuralgia. The patient was a man, and had the right leg affected.

Mr. Hogg had employed the author's plan with great success in several cases; and related the particulars of one case of sciatica with lumbago, in which, after having tried every remedy ineffectually for four months, Mr. Hancock had cured it by the administration of three doses of the croton oil. In a case of sciatica complicated with ascites, he had found relief from the exhibition of elaterium.

Mr. Hancock, in reply, stated that he had not overlooked the fact of irritation in connexion with pressure being a cause of sciatica, and believed it to be excited by the peristaltic action of the loaded bowels. He did not deny the existence of other causes of the disease, but considered them to con stitute the exceptions.—*Dublin Medical Press. from Med. Times.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, MAY, 1854.

Personal. Our readers will bear witness that we do not often task their patience with our personal affairs; but as the present number carries us nearly half way through the volume, we may perhaps be pardoned for calling their attention to the Journal, and its claims, (if it has any) to their kind consideration and assistance.

We assumed its control, and the risk attending its publication, with many misgivings; but having decided to carry it on for the year, we have taken some little pains to bring it to the notice of some of the profession previously unaware of its existence, by causing surplus copies to be sent to the address of such Physicians as came to our notice.

This was done, not to force it upon any, but to give it a fair chance for life, and also give every one an opportunity to subscribe, if they chose.

The propriety of this course, its success, which has far exceeded our most sanguine expectations, has proved: for we have received names and dollars to such an extent that one third of our present list is composed of *new* subscribers to the present volume. And with these names we have received such kind words of approbation and encouragement as cannot fail to stimulate us to a renewed effort to merit a continuance of their good opinion.

The permanancy of the Journal being a fixed fact, our chief attention will be devoted to its improvement. To this end we call upon our friends,—the friends of the Journal and all interested in medical progress,—to lend us their aid, and that all may feel a pecuniary interest in the matter, we pledge ourself to appropriate every dollar received for the Journal, to its improvement.

Come on, then, good friends. Persuade your neighbor to send us his dollar and *persuade yourself* to write a good original communication. We offer you a ready medium for free interchange of thought; why not avail yourselves of it? Why shut up the rich volume of your experience, to grow rusty and fade away to no profit to the world?

To any one receiving this No. who choses to send us his dollar for the current year, we can only say that we shall *try* to make the remaining numbers such as will give him the worth of his money.

STATE MEDICAL SOCIETY. Before our next number will reach its readers, the sixty-fourth annual meeting of this Society will have taken place. It is fitting we should say a word in connection with this event, to those of our readers who have never become members, in relation to the objects to be accomplished by the Society, and ask each to seriously consider whether he is in the performance of his whole duty to the profession of his choice, while withholding the aid which his membership and influence would render the State Society.

We are well aware of the reasons urged by many physicians of this State for standing aloof, but have yet to hear the first which should not rather lead to an opposite course.

Our Society is not to be regarded as perfect, but how is it to be improved and its influence increased, if those who see its wants most clearly stand at a distance and raise clamoring cries of censure and disapprobation of the doings of an association to aid which they have never raised a hand or expended a sixpence.

No one will deny that a "State Medical Society" is essential to the prosperity of the medical profession;—therefore, if ours is properly conducted, all regularly educated physicians should avail themselves of its advantages; if it is not, then it is high time for *all* to take hold and make it what it should be. We have no patience with those who maintain the position of alarmists, while destitute of any disposition to aid in removing the evils they so loudly decry.

The "New-Hampshire Medical Society" has done very much to advance the interests of legitimate medicine within this State, and we would claim credit for being prompted by a sincere desire for its welfare in all we say or do in relation to its management. Each member has an equal right to urge the adoption of such changes as the progressive character of medical science demands; and we may therefore hope to be pardoned for our endeavor to excite a thought in the minds of its members as to the possibility or probability of taking measures to enhance the usefulness of this time honored association.

We are well aware that this is a delicate subject, and that any very decisive effort to improve upon our old routine will be looked upon by many as the manifestation of a restless desire for change. Nevertheless, we feel it our duty to suggest, for the sober consideration of its members, that we make no such sign of profitable existence as the medical public have a right to expect from the State Society of New-Hampshire.

New-Hampshire intellect is considered as good as any,—we boast that we raise men as good as the best, and certainly no State has reason to be prouder of those of its children who have gone abroad, than ours. The ranks of our profession in other States embrace many favorite sons of New-Hampshire, and we have at home those of whom we have equal reason to be proud.

It will not be denied that we have among the members of our State Society equally strong minds as any who have emigrated; and we know no good reason why we should be longer subject to the taunts of "outside barbarians," as to our inefficiency.

Our annual meetings are both pleasant and profitable, and have become more and more interesting at each successive anniversary; but too much there said, however valuable, being unwritten save on the "treacherous tablets" of the brain, is lost to all but a few retentive memories.

This should not be so, and it behooves us to take into consideration the various measures proposed to increase the usefulness and influence of the Society.

The most prominent and promising of the measures seems to us to be the publication of our Annual Transactions. The pages of this Journal have always been at the service of the Society, and will continue to be, so far as may not conflict with the interest of the large body of our readers. They may be made use of in future, or the Society may, as do some other State Societies, publish an annual volume. The same course which proves productive and profitable in other States cannot fail to be equally so in ours.

Secondly, as to means, should the latter course approve itself; our annual tax is amply sufficient, if our tavern bills were limited as they should be, to the expense of the annual dinner; and we must be allowed to protest against the inequality of boarding and lodging a few members for a length of time which more than absorbs their annual assessment, while the majority are present only at the dinner. We have hoped for several years to see this matter set right.

We are led to hope for much good in the future of our Society, from the progressive interest and value of its meetings, and we ask that our remarks may be received in the same spirit in which we have penned them; which is that of hearty devotion to the best interests of the Society.

A REPORT ON THE HEALTH AND MORTALITY OF THE CITY OF MEMPHIS, *for the Year* 1853. BY CHARLES T. QUINTARD, M. D. *Published by order of the City Council.*

Prof. Quintard is one of the comparatively few who view the duty of the true physician as extending beyond the mere feeling the pulse and writing a prescription. He seeks to benefit his profession by benefitting the human race. This Report extends to 32 pages, and embraces an amount of vital statistics—"facts and figures"—which will be of value in all coming time. We transcribe the first three pages, as they furnish food for reflection for a thinking mind, whether within or without the pale of our profession.

"That the discoveries which have been made during the past half century as to the nature and treatment of disease, have increased the average longevity of human life, is a fact which no one will dispute who has paid any attention to the great improvements in the science of medicine. In a 'Report on the Health and Mortality of Memphis, for 1852,' which we had the honor of presenting to the Memphis Medical Society, we took occasion to refer to this fact, and stated, that, while in the latter part of the sixteenth century, one-half of all that were born died under five years of age; and the average longevity of the whole population was but eighteen years: at the beginning of the present century, one-half exceeded forty years. In a very able report on the vital statistics of Boston, by Dr. Lemuel Shattuck, published in the *American Journal of Medical Science*, for 1841 the author compares the ratio of mortality in that city, to the population, during a portion of the last century, with that prevailing at the time he wrote, or after an interval of one hundred years; in the former period there was one death to about thirty or thirty-five, or three per cent. of the population. "Now," says the author, "there is one in about forty-five, or 2.10 per cent. of the population." This shows a great improvement in the relative value of human life.

It will be remembered by some here present that I cited Macaulay, who says, "Every bricklayer who falls from a scaffold, every sweeper of a crossing who is run over by a carriage, now may have his wounds dressed and his limbs set with a skill such as, a hundred and sixty years ago, all the wealth of a great lord, like Ormond, or of a merchant prince, like Clayton, could not have purchased. Some frightful diseases have been extirpated by science and some have been banished by police. *The term of human life has been lengthened over the whole kingdom,* and especially in the towns. The year 1685 was not accounted sickly; yet in the year 1685 more than one in twenty-three of the inhabitants of the capital died. At present, only one inhabitant of the capital in forty dies annually. *The difference in salubrity between the London of the nineteenth century and the London of the seventeenth century is very far greater than the difference between London in an ordinary season and London in the cholera.*" So greatly has the term of human life been lengthened.

We find, in an address delivered by Professor Alonzo Clark, before the New York State Medical Society, some interesting facts bearing upon this point. Dr. Simpson, in his paper "On the Statistics of Surgery," states, that in 1786 the yearly rate of mortality in the whole of England and Wales, was *one in forty-two;* in 1801, it was one in forty-seven; and in 1831 it had diminished to one in forty-eight, showing a reduction of annual deaths by twenty-eight per cent. in the short period of half a century. (*Dublin Review*, vol. 7, p. 97.) Mr. Milne, in making up his well-known "Carlisle Life Tables," ascertained with the greatest care, the deaths in that town and its vicinity for the nine years following 1778. They were in proportion of one to 39.99 of the population of each year. It is ascertained, with equal certainty, that for the seven years ending with 1844, the deaths in this same Carlisle and its vicinity, were annually one in 52.6; the interval between these two periods is just fifty years, and the reduction of mortality is twenty-two per cent. "I will adopt the suggestion of the registrar-general, and assume for the present what I hope soon to prove," says Dr. Clark, "that what man desires most of all earthly things, is secured to him in fair measures by the unobtrusive, unnoticed labors of our ill-rewarded profession. In the lapse of half a century, twenty-eight persons, or if you please, the lower estimate, twenty-two persons saved alive out of every hundred, all of whom must previously have perished! What are all the other improvements of the same period compared with this? What though we boast that steam has been made a day laborer for the nations; what though the steamship equals in magnificence the fairy palace of fiction, and skims the water with its wooden wings, as does a bird the air; what, though the iron ways encircle the earth, and daily exhibit, as I believe they do, the highest reach of human power; what though the electric fluid has become our news-carrier; what though the arts have improved so as to cheapen many of the necessaries of life to half their former cost! neither of these, nay, all combined, can hardly single out the life that they have saved.

"France exhibits to us, very strikingly, the great results of professional labors. M. Charles Dupin, whose name is a sufficient guarantee for his statements, lately read before the Institute a paper on the vital statistics of that country, showing that from 1776 to 1843, (sixty-seven years) the duration of life had been increasing at the average rate of fifty-two days annually, so that the total gain in 2.3 of a century amounted to nine and a half years; and yet in no year of that period, whether during the republic, the consulate, or the empire, did the annual increase fall below nineteen days. What a fact have we here! Even during that dread period of French history in which the death-angel assumed the cap of liberty, and taxed the arts for new inventions to destroy life, and during the succeeding thirteen years, in which the war spirit reaped an almost unprecedented harvest, when science and art vied with each other in contributing to this work of slaughter, and the history of Europe is little more than a history of battles; during all this period, medicine alone lent all its energies to the preservation of life. How striking the contrast! How proud the success!"

But there are those who will tell us that these results do not belong to medicine, and trace them to that improved condition in the modes of life, so ably pointed out by the historian Macauley. We contend with Dr. Clark, and could easily demonstrate, that all that is valuable in these improvements and benefits, is based on principles elaborated and promulgated by the medical profession; that they depend in a great measure on the recognition and performances of the duties of the profession to the public, and it should not be lost sight of in these days of systems and sects, that all the solid benefits conferred on mankind are due to what is called the "Regular System."

Such being the results which the ablest arithmeticians have arrived at, through the application of figures to an immense number of facts, gathered from all parts of christendom, it becomes the members of the medical profession, in every section of our country, to contribute their mite towards the grand results which arise out of the strict performance of professional duties. It is chiefly in improving the medical police of towns, drainage, ventilation, etc. in the prevention of epidemic and contagious diseases, that the profession has contributed so largely to the comfort, happiness, and lengthened span of human life. This can only be done by a full and fair exposition of all the causes that are deleterious to the health of villages and communities. The very first step in our investigations, is one that demands a knowledge of all and every evil that has an influence upon the human system. It is worse than folly to endeavor to cover up, to keep out of sight, whatever there may be that operates prejudicially upon the health of the community. So long as the evils are kept out of sight, so long will they be left to work ruin and death. We believe in making every thing perfectly clear, and whenever there is any thing that demands the attention of the municipal authorities, it is a duty to point it out. It is a duty, because we see no reason why the life of man may not still further be prolonged; we do not believe its maximum duration is yet attained, and we feel assured that by the application of wise and judicious sanitary regulations it may become yet more valuable than it now is. Much has been done in the actual practice of medicine—in the addition of remedial agents to the materia medica, and in the improved therapeutics, to work out the results that we have glanced at; and there is no solitary reason why those improvements may not still continue. Such, then, being the absolute facts which we can present, we feel that we can present ourselves with confidence to an enlightened community, and demand a hearing on the all important subject of sanitary police."

HISTORY OF THE EPIDEMIC YELLOW FEVER AT NEW ORLEANS, LA., IN 1853. BY E. D. FENNER, M. D., *pp.* 84. *Printed by Hall, Clayton & Co., New York.*

Here we have *all* the history of this emphatically *Great Epidemic*, and by the one best fitted by the most favorable circumstances to give a reliable account. We are pleased with his clear and philosophical conclusions, from which we copy the following:

"If, then, it be true that Yellow Fever is not communicated from one person to another by immediate presence or contact, independent of other influences, oftener than *once in fifty or a hundred exposures*, it would certainly make but a *rare exception* to a general rule; and this I believe to be about the true and real value of the now popular and warmly advocated doctrine of the *contagiousness of Yellow Fever.* It is equally applicable to *fomites* of all kinds.

"I have now admitted, for the sake of argument, all that is contended for by the most strenuous advocates of contagion, and what does it amount to? —that Yellow Fever may be conveyed from place to place, in ships, goods and persons; and even be communicated to those who come in contact, yet *this effect is so seldom produced* as to make but *a rare exception to the general rule.* Now, does this afford sufficient inducement for the establishment of *Quarantine,* involving heavy expense, and throwing serious impediments in the way of commerce and travel? *That is the question!* and I only wish that the Legislature, who have to decide and act upon it, were as fully informed as they ought to be, as to all that has been done in regard to it within the last fifty years. France and England, two of the most enlightened and rigid governments in the world, after enforcing quarantine against Yellow Fever for half a century, are now abandoning it as *useless.* The reports that have been made to them by the able men appointed to investigate the subject show most plainly that all that can be done, to either *check* or *prevent* the ravages of Yellow Fever, consists *in proper attention to cleanliness, ventilation and drainage.*"

ON RHEUMATISM, RHEUMATIC GOUT, AND SCIATICA. *Their pathology, Symptoms, and Treatment.* BY HENRY WILLIAM FULLER, M. D., CANTAB., &c. *Published by* SAMUEL S., & WILLIAM WOOD, *New York*, *pp.* 322.

We were so much interested in this work that we omitted noticing it last month, intending to review at some length its more prominent points, but the pressure of daily duties has frustrated our intentions and we must be content to express in general terms our satisfaction with the book, so far as we have examined it.

Dr. F. attacks the common opinion that Rheumatism is caused by cold, and arrays a mass of negative evidence to show that such cannot be the common cause.

He views it as a constitutional disease, and the local symptoms as essential accompaniments; and from certain facts stated infers, "That the 'materies morbi,' on which the symptoms of rheumatism depend, is generated under certain circumstances in the system, and is so generated as a result of some obscure constitutional peculiarity, some particular form of mal assimilation."

All the grave, accidental accompaniments of rheumatic disease are discussed at length, both in a pathological and therapeutical point of view, and no man, whatever his views of the cause of the disease, can read this book without both pleasure and profit.

ALCOHOL AND THE CONSTITUTION OF MAN; *being a Popular, Scientific Account of the Chemical History and Properties of Alcohol, and its leading effects upon the Healthy Human Constitution.* Illustrated by a beautifully colored Chemical Chart. BY EDWARD L. YOUMANS, *New York. Fowler & Wells, pp.* 127.

his is a really learned and scientific work, and contains unanswerable proofs and evidences that alcoholic liquors are not fitted for the habitual use, as food or drink, of healthy human beings. If generally read it would doubtless prevent many from taking the first step on that downward road from which so few turn aside or return. But unfortunately, the two great classes of drinkers will not read, nor would they profit if they should read. The moderate drinker, who alone can be reached by appeals to his understanding, can rarely be made to see his danger till too late; and the mind of the habitual drunkard is too much stupified by indulgence to be reached by any arguments, however forcible. Yet we would commend this book to the intelligent part of community, as they will find here the best arguments to use in any effect they may make to stay the progress of intemperance.

"METAMORPHOSIS AND METEMPSYCHOSIS" is the subject of an introductory to the course of lectures on Chemistry in the Vermont Medical College, by Prof. THOMAS ANTISELL, M. D.

Unlike many introductories it is remarkably free from the noisy declamation which tickles the ear for a moment but leaves no permanent instruction. The class have shown their good sense in its publication, for it must have sounded well and reads first rate. None but a profound thinker could bring within such limited space so many instructive ideas.

THE

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[For the N. H. Journal of Medicine.]

SMALL POX AND VACCINATION.

Mr. Editor:—To a call, in the April No. of the N. H. Journal of Medicine, to New-Hampshire physicians to aid the cause of humanity by petitioning the Legislature upon the subject of compulsory vaccination, I will respond by submitting the following to your disposal.

The sanitary regulations of this State connected with the loathsome pestilence, small pox, in view of the present advanced state of medical science, is rather behind the times, and a disgrace to the statute books of an enlightened people. Although variola is considered one of the most contagious and destructive of the eruptive diseases, the conviction has been forced upon me by some experience in its treatment, that the danger is much enhanced by the panic created by the removal of the patient from a comfortable home to some out of the way place, there to be surrounded by attendants in many instances wholly unacquainted with the patient or his wants, and where, as the experience of the past winter teaches us, the patient is not always left, like the insane among barbarians, to pass through the disease in quiet to convalescence or the grave, but is liable to be placed upon the snow, to witness the conflagration of the house provided by the public humanity.

It is pretty generally admitted by physicians acquainted with varioloid, that a person who has had genuine kine pox tested by re-vaccination, (more particularly if the first vaccination was before puberty, and tested after,) is as exempt from an attack of small pox as he would be had he been infected with variola itself.

In the spring of 1841 a young man came home to his father's house in New-Hampshire, from Boston, sick. About the fourth day of his sickness a rash like eruption made its appearance, which was pronounced by his physician to be variola. The patient never had had kine pox. He died soon after the appearance of the eruption. The family were all vaccinated in two or three days after the death of this young man. The mother and one sister, who had washed the young man's clothes on his return, became infected. The mother had true variola quite severely, confluent on the face and some parts of the body; the vaccine did not take. The sister's case was modified by vaccination, the pustules being developed several days previous to the eruption of variola, which last was comparatively mild, the pustules being sparsely developed.

I had charge of the two last cases, which both recovered. The grandmother of the family had no recollection of having been vaccinated. I vaccinated her several times during my stay at the house, but she escaped both variola and vaccinia. It is proper to mention that she fumigated with sulphur daily. These patients were not moved from their home, and out of twenty or thirty exposed, all escaped but the two cases above mentioned,—being those who washed the clothes. How many of those exposed to the infection had been previously vaccinated, I am not able to recollect, as they were all vaccinated a short time after the exposure.

Now in this instance there was a great and unnecessary panic, provided they had been previously compelled to submit to vaccination. So far as a mandate of the selectmen could affect us, we were unpleasantly cut off from all communication with those out of the house. The ban declared the cats and dogs to be dangerous mediums, and liable to transmit the contagion. It did not reach the rodentia for obvious reasons, they being allowed to keep up friendly communication with the neighboring rats, in some respects leaving us like a California ship at quarantine in Rio, while the passengers have free communication with the people on shore. The miller refused to grind our grain; the smoke from our chimney was eyed with suspicion when it arched over towards the neighboring houses,—their doors having been closed and windows buttoned, for fear that it might serve as an arch for the infection to walk over the sanitary cordon.

In an adjoining town a few years since three cases of variola occurred, the patients not having been previously vaccinated; also ten cases of varioloid in the persons of those who had been previously vaccinated—all being the result of a case of mild varioloid. With two other exceptions, the cases of varioloid required but little treatment. The first case of variola was developed in a child eleven months. I took charge of the case ten days after the attack, it having been treated by the family's neighbors as a case of rash. The late Dr. McQueston of Washington had been called the day previous to my seeing it, when it bore unmistakable evidence of its true character. I vaccinated an older child seven days previous to the attack of small pox, which last was quite mild, being modified by the vaccination,—both being developed and modifying each other. The last was scarcely marked by the eruption, and the first but little, as we endeavored to exclude the light. The third case of variola, occurring in an unprotected person, was quite severe at the commencement, but was evidently cut short by the kine pox, having been vaccinated five days before the eruption of variola appeared. The diseases run on together, modifying each other, vesication taking place much earlier than it otherwise would have done. In each of the above cases of varioloid a well marked cicatrix from previous vaccination was present, which was conclusive evidence that the cicatrix which was formerly believed to be reliable evidence of protection, could not in all cases be depended upon. All that were re-vaccinated soon after exposure escaped varioloid; of the last there were numerous instances. The above thirteen cases all recovered,—none of them being removed from their homes.

May the Legislature of New-Hampshire at its coming session wisely conclude that the time is past which rendered it necessary for the laws of New-Hampshire to leave it possible for the sick to be forced to leave their friends when they most need their kind attentions; and as a substitute for the present law, make it absolutely necessary for every scholar to be vaccinated before they can have a seat in the school-room.

THOMAS SANBORN.

Newport, N. H., May, 1854.

[For the N. H. Journal of Medicine.]

CASES OF "SPURIOUS PREGNANCY."

The practicing physician who is occupied for a series of years in investigating and prescribing for sick people, will find many novel, perplexing and unique cases that will be trying both to his skill and patience.

Females frequently feign pregnancy for selfish or criminal purposes, and some who honestly think themselves in a state of gestation are deceived. I will describe some cases of the latter sort that have occurred in my practice, thinking they may be interesting to some of the readers of the Journal.

Case 1*st.* Occurred July 25th, 1844, in the town of Johnson. Mrs. S. felt assured that she was in a state of gestation; (being a second wife, and anxious to "take away her reproach among women,") and was, as she supposed, taken in labor at the above date, and called in her female attendants and a "*pepper doctor,*"—for we have such creatures in this vicinity.

After a labor of twenty-four hours, I was summoned, a distance of nine miles. After a slight examination per vaginam, I was asked by the attendants if there was a prospect for a speedy delivery. To this I answered that I perceived *none*. I then placed my hand on the abdomen, (or where it should have been;) there was not the *least* prominence,—it was even lower than the illium. In a gentle manner I asked the lady if she might not possibly be deceived. She averred in a peremptory manner "she was not." The husband as strongly averred "I know there is a bady—I have felt it jump a hundred times."

All my arguments availed nothing to convince them of their mistake, until I assured them there was nothing there. The lady wept bitterly, but consented to dismiss her attendants without an heir.

Case 2d. Nov. 11th, 1848, called to Mrs. C., of Hydepark, who supposed she had completed the term of gestation, and was in labor with her second child. Being very corpulent, (weight 300 pounds,) she did not shew her situation as a more spare female would have done.

It is a curious phenomena to witness a female with all appearance of labor pains,—writhing, moaning, pulling at the hands of her attendants as in real labor—and all an imagination or an excitement of the mind. I am at a loss to account for such a transaction.

Immediately after informing them that they are not pregnant, and satisfying them that such is not the case, their pain subsides, and they resume their domestic affairs. All this occurred in this case. The lady was deceived; the husband was offended, and manifested his boorish disposition by censuring his wife in rude terms for not knowing her situation. I relate this to show how clownish men will occasionally appear.

Case 3d. March 1st, 1851, I was called to Mrs. O., of Belvidere, who supposed herself at the end of a term of gestation, and in labor. She had summoned her female attendants, and was suffering occasional pains with a very wry face. I made a vaginal examination, but to no good purpose; placed my hand on the abdomen, but could not perceive the uterus; there was no prominence above the pubis. I asked her if she was not deceived. She appeared as much annoyed as she would have been at the same question after the birth of a child, and was unwilling to hear me expostulate or explain. I said to her, "there is no child there." Her husband coming in about this time, was told by the wife what "the doctor" had said; coming into an adjoining room, to which I had retired with some of the attendants, he called me some hard names,—said he "was not a fool;" "he *knew* there was a baby, for he had felt the motion many times."

In answer to this lecture and abuse, I referred the clown to other physicians, saying, "send for whom you please, I will retire," which I did. Another physician was called, but did not find an heir. He, however, informed the lady that the ligaments of one side of the uterus were relaxed, and that organ had pitched or fell over to one side, which would cause the feelings of gestation.

One case occurred in my circle of practice where a lady of 45 thought herself pregnant, and made the usual preparation of small clothes, &c., but had no occasion to use them, much to the disappointment and annoyance of the husband.

Many cases similar to the above have come to my knowledge, but these are all which have occurred in my own practice.

ARIEL HUNTON.

Hydepark, Vt., April, 1854.

[For the N. H. Journal of Medicine.]

TREATMENT OF PSORIASIS.

Medical writers have so many different names and descriptions of squamous and papular diseases, that it is rather irksome to follow them; and the multiplicity of varieties serve only to perplex. I would call attention to one form of psoriasis, which appears to be a hereditary disease, and vulgarly called salt rheum,—as also are many other varieties of this as well as some other diseases.

If the following remedy will succeed as well in other hands as it has in mine for thirty years past, it will be found very valuable. For an external application, night and morning, in cases of the above complaint, in its varieties, (which are many where writers split hairs,) for chapped hands, sore lips, or for cicatrizing ulcers:

℞. Mutton suet,
Yellow wax,
Pine resin,
Lard,

Of each equal quantities; melt and stir a long time, as the ingredients do not readily incorporate.

In addition to the above an internal alterative is demanded. The article I use for this purpose is one grain of corrosive sublimate dissolved in one ounce of water, and its taste covered by some saccharine substance. For an adult administer of this gtt. v. morning and evening, increasing one drop every seventh day till the dose reaches to ten drops. Minute doses of mercury in some form, administered internally or applied externally, or both, constitute the most potent alterative and discutient known to me.

The above preparation applied to indolent tumors, or any tumor which it is desirable to discuss, is a judicious application. Brethren, *try* the above remedies.

A. HUNTON.

[For the N. H. Journal of Medicine.]

ANOTHER CASE OF "IMPACTION OF THE RECTUM."

Mr. Editor:—I notice in the April No. of your Journal a case of "Impaction of the Rectum," reported by Dr. J. S. Fernald, which induces me to send you the following:

Dec. 26, 1851. Was called, in consultation with Dr. P——, of this town, to see a patient suffering, as he supposed, from "*disease of the prostate gland.*"

On my arrival I found the patient, (who was somewhere near 80 years of age,) in great distress, and unable to evacuate the contents of his bladder, although he very much desired to do so.

This retention of urine led the medical attendant, (who had never received a diploma, as I subsequently learned,) to *suspect* "disease of the prostate gland." I further learned that the bowels had not acted for several days. The "doctor" said he had been giving calomel and jalap with gamboge and aloes, followed by camphor and opium.

As a first step I passed a catheter and emptied the bladder, which much relieved his suffering. The rectum was then examined, and as I expected, found distended with dry, hard fœces, which, by pressing against the neck of the bladder, had effectually closed the outlet of that viscus.

An enema of warm water and molasses was ordered to be gently thrown up the rectum, which soon brought away the offending matters. In the evening I found the old man very comfortable, and thankful for the relief afforded by the above mentioned measures.

With this, my first contribution to your pages, allow me to present my best wishes for the success of the "N. H. Journal of Medicine."

Yours truly, A. J. GILSON, M. D.

East-Jaffrey, N. H., April 18*th*, 1854.

"The Change of Life" in Women; *with Remarks on the Periods usually called "Critical."* By Joseph Parrish, M. D. *Introductory Remarks—Specialities; Abuse of the Speculum; Errors of Popular Opinion; Changes Natural.*

I propose to offer, in the present and subsequent numbers of this journal, a series of essays upon the subject designated by the above title, to which the candid attention of the profession is invited. It is one not usually treated of in books to any considerable extent, and it is feared not regarded in general practice, in the light which nature, and sound views of science would dictate; and as the investigation of it may elicit some novel reflections which are opposed to generally received notions on the subject, I enter upon it with cautious deference to recognized authority, and yet, I trust, in the spirit of independent inquiry. While I would urge that the changes in the life of woman should be met by her professional attendant with an honest regard for her welfare—that he should consider them as *appointed times* in her history, and not as an outbreak of an erratic nature, or as accidents in the working of a delicate machinery—I would have the profession gracefully to shrink from undue interference with the operations of nature, and save itself from the imputation of rash meddling with the wise and essential developments of natural law; that it may not be said of any of her votaries,

> "——— fools rush in, where angels fear to tread."

In these times, when *specialities* are becoming the order of the day in medicine; when physicians are apt to select some particular subject upon which to display their talent and exercise their skill, there is great danger of exaggeration, both as to the nature and treatment of the particular diseases that may claim attention. And though it may be true that greater light may be elaborated by such special investigations, it is well to guard against at least *extravagant error*. With reference to the matter before us, we fear there is more error than may be freely confessed. Woman herself, according to the custom of the day, has made up her mind that these changes are always more or less dangerous; and the physician is too often tempted to accord with her prejudices, and to subject her to treatment, sometimes the most unscientific in its character, and in its results most unsatisfactory, except to the pecuniary *taste* of the prescriber. While I would not apply this remark to the whole profession, I would appeal to the observation and conviction of all, and ask,—Is there any subject within the domain of medical science that is more frequently presented by the empiric, than that of female disease? Are there not more "cures" offered through the press, and in the social circles of females, for the so-called diseases of this, than any other? Does not almost every paper contain advertisements of specifics to conduct females safely though their "critical periods?" And even within the ranks of legitimate medicine, are there not hundreds of physicians scattered throughout our land, who are running wild with enthusiasm, into false theories and adopting injurious practices, with reference to the uterine system.

What can be more humiliating to a high standard of professional honor and probity, than to see a man, who may be honestly enough, and with propriety, devoting himself to the study and cure of female diseases, stoop to the practice of examining with the eye all cases of suspected-disorder, or displacement of the uterus? Taking young girls from the school or the nursery, and exposing them to the degrading practice of ocular inspection. There are cases when this course may be indicated; but to aver that the practice should became common, is an absurdity, against which all past experience in medicine, all decency in morals, and all honor in manhood, should exclaim with unceasing opposition. Instances have come to the knowledge of the writer, where the officiousness of a so-called "womb doctor," young ladies, just developing into maternal proportions, and experiencing the sensations peculiar to that particular age and condition, have been suspected of uterine disease, and exposed, without the least necessity, to having the vagina dilated by a speculum or bougie, so that the operator and friends of the patient might have an opportunity of "seeing for themselves" the appearance of the organ. Credulous and anxious mothers, superstitious nurses, and meddling female friends, were perhaps called to witness that the diagnostic of the physician was correct, while they themselves could not judge between a natural or disordered appearance of the parts; and yet this speculum and bougie practice is becoming extremely fashionable in some places, and the physician who can boast of having *seen* the greatest number of *wombs* is esteemed worthy of more credit than the hundreds of less officious, and yet quite as successful practitioners, who have been content to use the speculum as a necessity, and not as an amusing boast.

Take, again, the other period of life, when the uterus, to use a familiar comparison, "retires from active service;" how common it is to act at this important change as if the organ was rebelling against a natural law, instead of yielding to an unalterable decree; and to impress the mind of the female with the belief that she is doomed during her remaining years to countless ailments, unless she submits to medical treatment. It would be just as rational for the husbandman to force open the advancing bud of spring, or to climb the trees of his forest to assist nature in stripping them of their falling leaves in autumn, as to interfere with the opening bud, or the falling leaf, in the vernal and autumnal seasons of womanhood, unless such interference is positively demanded by a departure in the constitution from a natural condition. What these departures may be, and how they are to be managed, will occupy our thoughts in future. If there are pains, and sensations of an unusual nature, the doctor suspects, or says there is danger—as the function of the organ is now to cease—of cancer, or some kindred malady, and to judge that all is right, or find out what it wrong, he *exhorts* his patient into a panic; and she, wearied with undue advice, and alarmed by her own feelings rendered morbid and acutely sensitive by constant direction of the mind to herself, submits to *inspection*, perhaps to cauterization, and she escapes, if with nothing worse, perhaps with irritability of the organ, and deranged nervous system, that are entailed upon her for life.

We should not disclaim against specialities—we are glad to see them pursued in the hands of honest and prudent men; and no one is more deserving of the best talent and most arduous labor, that our profession can supply, than that which comprehends the entire uterine system; but we would raise a voice, and bear a testimony, be it ever so feeble—against the practice that is becoming common in certain quarters, of placing woman in that position in which she is made the special victim of professional cupidity, because she is taught to believe that she is particularly the subject of alarming disease; and if the effort now made to shield her from offensive professional intrusion may be in the least degree successful, while it may contribute to enlighten her as to her true position in these respects, the author will be amply rewarded for his labor.

That there are two changes in the life of woman termed *critical*, is well known to all; but that these are necessarily dangerous, is not so readily admitted. Every female, of sufficient years, experiences one or both, in the course of her history. Every careful mother, to whom has been assigned the responsible charge of rearing a daughter, knows what it is to look forward with anxiety to the period of pubescence in her growing child. The girl of twelve years becomes in her eyes a new being, and after her twelfth birthday, the watchings and fears, the doubts and hopes, that toss her heart to and fro, as she looks with maternal solicitude upon the daily course of her child, are only known to herself. But why these conflicting emotions? The child is well; she has been reared so far with a good degree of health; and whence the trembling now? Nature has appointed a change—a *critical* period. In that girlhood is to commence a development that is to assume a woman's nature—organs of the body, that have been hitherto dormant, are now to be aroused to actions, as essential to the health of their possessor as they are to her guiltless mind novel and mysterious—she is to grow into woman's estate. Her bones, muscles—all her tissues and organs—are to spread out with a rapidity hitherto unknown.

In stature she becomes a woman, and in mind more womanly. The mother is anxious least any natural or artificial interruption should arrest the progress of nature; and then, as she passes on in her own circle of years, till the age of forty or forty-five, she begins to experience a new train of thoughts, and to have new fears, and many anxious hours by day and night, with reference to herself. The time is at hand when nature shall visit her with the assurance that she has reached the summit of maturity, and that henceforth she will pass over the downward slope of life. Those very functions, the healthy manifestation of which in the child she so much desired, and watched with so much care, are now to cease in herself; and though she may have borne children, and had a goodly heritage through all the days of her maturity, now she shrinks, and yet rejoices. She fears lest it may not be well with her, and yet would be glad, because the time is past for her to become the mother of any more offspring. She wants to cross the line, and yet she falters. She knows she must, and yet she fears; she feels that she will, and yet she would not. Nature has appointed another change. In that womanhood, matured by experience and care, is now commencing the process of decline. Organs that have contributed by their operations to constitute her equal to her sphere and calling, now, as in childhood, become dormant again, and she stands upon the threshold of old age, looking fearfully forward to years of suffering and affliction, at the very time when of all others she should be cheered with a bright prospect of an easy decline, because the cessation is the kind monitor that comes, bidding her lay aside the fears and pains of child-birth, to be released from the wearisome toil of the nursery, and in the full bloom of ripened age, crowned by experience and wisdom, to scatter about her, in the domestic circle, and mid her little community of friends, the fruits of her past labors in the field of life. It will be shown hereafter why woman should learn to welcome rather than fear this change—and why her physician should stand by her at this interesting crisis, not to alarm, but to encourage and support her.

The term of thirty or thirty-five years, that is embraced between these two periods in the life of woman, may be considered as the time of her maturity, when the organs of the body, upon which these changes depend, should be in the free exercise of their respective functions. All the processes of generation, birth, lactation, &c., that are peculiar to this stage of life, it is not, however, now my purpose to consider; ample scope being afforded for remark upon the peculiarities that are developed at the appearance and cessation of the menses; and as these are seasons in woman's history that are anticipated by such conflicting emotions, it becomes the physician to study well the course and results of their development, both as to the moral and physical changes that are coincident with them. It is also proper for females themselves to understand their position, and to have their minds relieved of needless anxiety and fear at these times. We will offer the suggestion as a starting point, that these changes, although called critical, are natural, and are not to be interfered with unless some abnormal symptoms accompany them.

CHANGES OF CHILDHOOD—CHARACTERISTIC CHANGE IN THE FEMALE—WHAT IS IT?—ITS OFFICE; ORGANS INVOLVED; EXTENT OF THE CHANGE.

From the earliest period of infancy, to mature age, there is a constant progression in the development of the human organism. There are organs, which may be comparatively useless in feeble infancy, that are destined in the course of ripening years to serve essential purposes in the human economy; while others are from month to month, and from year to year, modified in their capacity, and prepared to perform functions, which, though similar in kind, differ materially in degree. The babe, as it reposes upon its mother's bosom, careless of all surrounding objects and influences, is itself a passive being. Its eyes may be opened, and appreciate the surrounding light, and yet, while the objects within its visual range may be daguerreotyped upon the miniature retina with distinctness, there is no evidence of an intelligent impression being transferred to the brain. The brain as yet may be considered as a latent organ. It is the unpolished plate, waiting for the hand of the artist to *change* its surface, and fit it for the reception of the impression already pictured within the frame work of the instrument. In the lapse of time, the cerebral function becomes apparent; the child evidently exhibits the phenomenon of mental perception; thought is elaborated, and the period comes, when judgment, like a feeble stem, sprouts forth, and continues to grow, through constantly multiplying changes, till it assumes the type awarded by the Great Disposer, appropriate to the finite condition of its possessor.

Again, in the early period of life the infant is only capable of receiving such nutriment as does not require mastication; nature has indicated this, most certainly, in witholding the teeth from the child, and supplying a maternal fountain equal to its wants. The stomach at this stage of existence is not capable of appropriating the stronger food, that it will afterwards demand as essential to the vigor of the individual. A *change* must be wrought in the organ, to meet the *change* of circumstances—and as it may be matured the teeth come, and go again, in pairs, the jaws widen, and the muscles, covering and moving them, strengthen, so as to execute the stern demands of a *natural law*. As the brain and its appendages connect with the vision, so the stomach and its appendages connected with nutrition, *change* in their size, capacity and power, from year to year. As the former may be said to be the centre of the nervous system, and the latter the centre of the nutritive system, there is a corresponding *change* in the power and susceptibility of the equalizing medium, exhibited in the nervous arrangement with which they are both essentially connected. It is the telegraph by which disorder is announced. If the brain or the nervous system becomes deranged, the stomach and nutritive system feel it, and *vice versa;* while either, with a powerful reflex action, may agitate the whole organism. Hence the familiar examples of disease incident to the period of dentition, the details of which it will be needless to enumerate, as the reference here made to the subject of early childhood and its *changes* is merely for the purpose of affording an analogy, from which to derive a confirmation of the doctrine, presented in the introductory essay—viz: that the "Changes of Life" in women are natural, and not to be interfered with, unless some abnormal symptoms accompany them.

The peculiarities of childhood already noticed are natural to both sexes; but the first great *change* to which the human female is subject is menstruation. The word menstruation means simply a monthy flow. Its etymology does not embrace the character or quantity of the discharge, referring only to its periodicity. The organs from which it comes are the uterus and its appendages. Its office is to transform the girl from childhood to the estate of a woman. It performs its office by developing a latent organ, hitherto inactive, and apparently useless. Power is exhibited by the transformation —power to conceive, and to mature a living human being.

The period for the appearance of the menses, called *menophania*, occurs generally in this climate between the ages of twelve and fourteen years. We then have before us at this age of female life a new organ with its appendages, and a new function. To examine them briefly in connection with their sympathies and relations, will be the object of this essay.

A new organ—a womb. For twelve years it has lain in its pelvic bed, without alteration, except a very gradual increase of size, to maintain its progressive relation with other parts of the economy. A truncated conoid body, flattened somewhat upon its surface, nearly an inch in thickness, about twice that length, and in breadth perhaps midway between the two. It has a body and a neck, with a slight fissure or cavity occupying its interior, and of the same shape, terminating below in a corresponding opening, called its mouth, or *os uteri*.

Its appendages—Fallopian tubes, situated above and on either side, communicating with the upper angles of the internal cavity by extremely small openings, and extending laterally four or five inches, at first straight and narrow, but in their course extremely tortuous, till they terminate in a wide fringe, called by anatomists the *fimbriated extremity*.

The ovaries—two ovoid bodies, containing a clear fluid, placed on each side of the uterus, and supported by the uterine ligaments, into which one of the tendrils of the fringed extremity of the tube before described terminate, in order to form a direct communication with the cavity of the uterus.

The vagina—a canal, or opening, five or six inches in length, embracing the neck of the uterus above, and terminating externally.

These varied, complicated structures, spring speedily into new life,—become sensitive and excitable. The entire system sympathizes with the effort, and there is a rapid change in the whole being—a change too familiar to need a detailed description.

Consider for a moment, however, the extent of this change. The womb, and its immediate tributaries, if I may so call its appendages, are not only concerned, but they make a demand upon the heart, and through it upon the circulatory system—the spinal marrow, and through it the entire nervous structure—the brain, and through it the intellect and moral nature, until all are forced into the work. The heart beats more vigorously, perhaps, and the pulse is more rapid. The nervous force is distributed, it may be with some inequality and excitement. The brain is more acute, and the moral sensibilities more intense. Such a general change in the habits of the constitution, in the character and development of mental phenomena, in the degree and force of moral impressions, renders this period one of great interest, while the organs concerned in this process are being gradually developed. Their peculiar function appears at once—sometimes without premonition. The disease often comes on in a moment, or the child may rise from bed in the morning, alarmed by the presence of a bloody flow from her body, she knows not whence, or how; and if the general health be good, if her mode of life has been natural, if her mind has not been over-taxed, and her body subjected to irregular pressure or constraint, it comes even suddenly, without danger—but more of this hereafter.

What a wonderful provision of nature. It affords to the human female a characteristic mark, not known to any other being—a mark distinguished by a sanguineous flow from the uterus, every lunar month, which continues from three to six days, and measures in quantity from eight to ten ounces. Does it cause the general development of the system, or is it the result of growth in the individual? This is a question unsettled by physiologists; all we can say upon the subject is, that the menstrual development is coincident with the general increase of size and power in the mental and physical frame—that its occurrence makes an important *change* in the habitudes of the individual, and that it is a natural appearance; that it is essential to a healthy condition of mind and body. Its sympathies, then, are with every part of the human structure, because it maintains a relation to every part. Without it there cannot be perfection in development. With it, properly regulated and sustained, there may be a perfect existence. If its appearance is modified by excess, or the reverse, there is a corresponding modification in its relations to other organs. Its sympathies become morbid, and disease is the result. So, again, there may be a power over the uterine system, employed by morbid changes occurring in other organs; a power sufficient to arrest the menstrual flow, to diminish, or to increase it. As has been said already, the telegraph by which these sympathies are conducted is the medium of equalizing disturbed and opposing forces; and if we regard not the nervous system in our therapeutic appliances to disorders of menstruation, we shall fail to display that tact and wisdom, which should ever emanate from and adorn the medical profession.

POWER OF FEMALE SYSTEM — EVIDENCE OF IT IN SYMPATHY, CONCEPTION, GROWTH OF EMBRYO, CESSATION OF MENSES, LACTATION,—POWER HIDDEN,—MORAL AND MENTAL CHANGES.

In the changes to which reference has been made, there is an allusion to the power or capacity of the female system: The power exercised by the generative organs upon other parts of the body, and the reciprocal influence or control, felt by these organs, from other parts. Leaving for the present the question of diseased action, we may consider these congregate systems in their normal dependencies on each other.

Power is a significant word. It implies the exercise of some inherent force. If that force is latent, its exhibition proves the power of development. It is active—it is the *vis a tergo*, through which the life force speaks in the progressive existence of the being. Without it there can be no growth. The wheels of life cannot move in their circle of organic structures. The machinery by which the production of the animal are evolved, must of necessity be arrested; and certainly, as the wise man has said, will "the pitcher be broken at the fountain." Death is the result of a want of power, whether it be from disease, or the natural wearing out of the thread of life. This suggests the idea of the *limited* nature of this motive power: limited, because the life of the animal is itself confined within certain bounds; and if it be limited, it may be modified. It may be excessive in its manifestations at one particular part of the body, or other, and distant influences may take from it a portion of the energy allotted to that part, by which it must necessarily suffer.

Now, in the change of girlhood, called menstruation, there is not only strong evidence of this power, but of its action through sympathy. The uterine system being the great central characteristic of female life, around which moves the circle of all the mental, moral and physical phenomena peculiar to this stage of existence, the flow may be affected through either of these media, both as to the time of its appearance and its character. For example—if the mind should be over-taxed, and the vital force summoned to the support of the mental effort to a degree beyond its share, the uterine supply may be measurably withheld, and the production which should result from a fair and equable working of the machinery, may be evolved. The law of sympathy, in full force in such a case, between the mind, which maintains its supremacy, and the struggling uterus, the latter is robbed of its proportion of vital energy, and the whole system, thus disturbed in its sympathies and relations, gives evidence of disorder in some form. Again,—a fright, or any strong emotion, may reäct upon the uterine organs, and produce an excessive flow of the menses. And yet again—a physical injury, or shock, as a sudden fall, or fatiguing exercise, may, by a reflex movement, contribute to the hasty, if not premature development of the uterine flow, by the operation of the same immutable principle.

The uterus that has been dormant for years, and is now aroused, producing a new fluid, by which its capacity may be known and measured, possesses the power of conception. In this function, likewise, it demands the sympathies of the entire being of which it forms a part. The mental, moral and physical attributes of that being are exercised in all its performances. The impressions that fasten themselves upon the mind, the moral emotions which spring up simultaneously in the heart, and the physical changes that occur, all bear an interesting and important relation to each other, and each contributes its portion to maintain the uterus in its office. The new organ and its appendages are all concerned. The uterus itself—its tubes—its ovaries—its vagina—each has a share in the *change*. The absence or inability of either will impair or destroy the perfection and harmony of the arrangement, and the uses it is intended to serve. There is likewise power to *mature* a living being. The generative apparatus developed now, and in the fulfillment of a natural law, is still undergoing *change*. Menstruation and conception have already occurred. The speck that forms the embryo must grow out of its embryonic state, and assume its fœtal life.

The fœtus in utero must develop its proportions in due season, and then become a living being in the world of life without. The changes in size, shape, &c., of the embryo and fœtus are marked by corresponding changes in the habits, feelings and tastes of the mother, all of which are striking, but too frequently unregarded, if not unobserved. Mark then—the uterus, from a passive organ, some two inches in length, gradually enlarges, rises out of the pelvis, extends upward towards the chest, and widens laterally till it occupies nearly the entire abdomen. In texture it is also altered. From an apparently solid mass of muscle, divided by a single fissure, it is stretched into a thin texture, till distinct fibres are seen extending in various directions; and the internal cavity, instead of being a thread-like cleft in the substance of the organ, becomes the residence of a living being, of human form and dimensions. The Fallopian tubes are pressed aside; the ovaries crowded out of their place; the vagina laden with a heavy weight, and often enormously congested, the bladder flattened, and the intestines greatly compressed. For six months at least, this state of things is experienced in a greater or less degree, until the time of parturition comes, when, by the sudden removal of the contents of the womb, it collapses into its former state; not, however, by a gradual decline, but by the most heroic throes of nature, in the exhibition of tremendous power. And with its return, its appendages follow, and take their wonted places, the viscera are replaced, and the whole organism again restored.

Let us not overlook the fact, that with the occurrence of conception the menses cease to flow, and that with the close of pregnancy, lactation commences. Cessation of the menses at the occurrence of gestation is a natural and legitimate consequence. It may be true, that there are exceptions to this rule, but the rule is still the same. And it is an obviously wise one. The womb, when menstruating, performs a function widely different from what it is called to in the process of gestation, and it may not exert two opposing forces at the same time. Lactation has likewise its separate design—a design affecting not merely the child that is to be nourished at the maternal fountain, but one adapted to protect the constitution of the mother. The breasts, in furnishing a supply of nutriment, allow the womb, to which they are allied by a near sympathetic relation, to rest, perhaps for a whole year, during which time the female is saved the toils and trials of the pregnant condition. All this is natural. The vast changes that have been described, as occurring during the long period of utero-gestation, from the time of its commencement to its close, are all in obedience to the law of life—all natural; and the physician does not interfere to arrest, or scarcely to modify them. Take for example the "morning sickness," that passes like a wave through the whole economy, disturbing the repose of almost every organ, and for three consecutive months subjecting its victim to harassing discomforts that no medicine can relieve. The vomiting and general distress, dependent upon this condition of the system, is not disease, unless pregnancy is disease. It is a symptom of gestation, and if there be no departure from health in the cause, the symptom cannot be morbid. The experience of the profession everywhere, and in all times, corroborates this view of the subject. As far back as the days of Hippocrates, the illustrious father of medicine declared—"If the catamenia are suppressed, without being followed by rigor or fever, *but by disinclination for food*, pregnancy may be suspected." Who then would treat the vomiting of pregnancy as gastritis? Or who would subject his patient, under such circumstances, to a "course of mercury," for example, as he might be disposed to do, if pregnancy did not exist? As a general rule, no treatment is required in the pregnant condition, if the patient will but observe ordinary hygienic rules. So when the period is at an end, and the child is born, but little medication, if any, is necessary, unless disease may interfere, and demand professional aid.

In all these changes, striking and wonderful as they are, nature is the kind physician who counsels, and whose gentle hand directs the power that accomplishes them all. We cannot estimate their extent, because they are performed in silence and obscurity. As the hidden seed in the bosom of the soil, that shoots forth and grows, and becomes the wide spread shelter, and the prolific bearer of goodly fruit, performs all its wonderful changes in unobserved silence, moved by a concealed vitality that no art can supply—so do the "changes in the life of woman," that are connected with the uterine system, go on in the mysterious chambers of her own organism. The hidden uterus, aroused from its long lethargy, grows, and developes the whole being, first, giving evidence of its power to execute the command to "be fruitful and multiply," and then by the same inheret *vis vitale*, spreading out, and affording shelter for a living being, and bearing it into the world.

With all these physical changes and developments, we should not overlook the differences in moral and mental character. The change in these respects occurring at mature girlhood, have already been noticed; but as those presented during the course of utero gestation too often escape observation, perhaps some of them may be recalled here. The morbid temperament, often irritable, and exceedingly sensitive, and it may be desponding; and the seemingly disordered, and even loathsome appetite, in the early months of the pregnant female, must be familiar to the careful observer. With the "disinclination for food," or the unnatural appetite, and the distressing sickness, it would seem reasonable to anticipate a sensitive temper, a disposition for retirement, even from the fondest friends, and a morbid feasting of the mind on imaginary ills and delusive fears. But when we can realize these exhibitions of character, as the result of uterine disturbance acting sympathetically upon the brain, we shall reach a physiological fact that may serve us an important purpose in other manifestation of *change* that may occur in the uterine function. It is not urged that these peculiar displays of physical phenomena are universal, but that they, or some kindred exhibitions of perverted taste, both mental and physical, are exceedingly common, no one will attempt to deny. Take a lady for example, of refined and amiable disposition, who during the first few months of pregnancy, shows a character just the reverse of her accustomed habit; and it cannot be satisfactorily accounted for in any other way. She is dissatisfied with herself, mortified and grieved, and yet she cannot control her feelings and desires. They are indications of a state of the system, at once peculiar and astonishing; indications that point to a series of connecting influences between the thinking and the generative, that shows them to be intimately associated.

Now if they be so closely related, and the uterus may produce such marked changes in the mental character, why not the brain react upon the womb, and create a corresponding diversity of effects? For the time comes in the history of female life, when the mind acts with mature vigor, and the generative organs decline.

Let us explain. The changes in the uterus connected with conception and its immediate results, are independent of mind. They occur when exposed to the natural stimulus, whether the will of the individual concurs, or not. The mind may oppose, and yet the cell that is lodged in the womb shall grow out of its own life, into its embryo state, and then onward to its fœtal existence. But not so in the dreaded "change of life," occurring in more advanced years. When the uterus will have lived out its term of active service, return to its first estate, and become again a passive organ, the mind will have just grown up to its full proportions, and be capable of acting with a corresponding power. It is therefore suggested, that if the individual be taught to anticipate this change, with cheerful expectations, many of the ills now attendant upon it may be avoided.

Let us enquire what they are.—*New-Jersey Medical Reporter.*

TO BE CONTINUED.

Treatment of Local Inflammations by Impermeable Plasters. An observation upon peritonitis, communicated during the last sitting of the French Academy of Medicine by Dr. Robert Latour, causes us to make known, as precisely as possible, the mode of treatment reported by the author.

Dr. Robert Latour's starting point is the opinion of M. Fourcault, that if by means of an impermeable plaster we exclude the skin of a warm-blooded animal from the action of the atmospheric air, the temperature of the animal will combine and diminish, until the powers of life finally succumb. The immediate action of the air upon the skin, then, is necessary for the development of the animal heat. On the other hand, the local increase of this temperature being the initial phenomenon of inflammation, the author has been led to think that if the inflamed parts were deprived of all contact with the air, the morbid action would be arrested. Experience has tended to confirm this supposition. The means employed by M. Robert Latour to shelter the skin from all contact with the air, is collodion, with the addition of castor oil and turpentine, after the following formula:

Collodion (prepared after the formula of M. Mialhe,)	30 grammes.
Venice turpentine	15 decigrammes.
Castor oil	5 decigrammes.

The collodion is spread upon the diseased part by a brush. Care should be taken to make a coating thick enough to afford proper resistance, and also to go beyond the limits of the inflammation, in all directions.

The diseases against which the author has employed this method of treatment are numerous: erysipelas, zona, traumatic lesions, burns, acute articular rheumatism, peritonitis, pleurisy, &c., are of the number. He reports eighty observations, in which this means has been constantly followed by success. Since M. Robert Latour has made these results known, other physicians have collected facts which go to prove the utility of impermeable plasters; thus M. Blache has seen an inflammation of the breast rapidly disappear by the use of applications of collodion. Experience appears, then, to pronounce in favor of this mode of treatment. But is it really to the diminution of the animal heat that we must attribute the happy effects of the impermeable plasters? There doubt begins to exist. It matters little, however, what the explanation may be, if the therapeutical action of the means employed be really incontestable. N. L. C.

New-York Medical Gazette.

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, JUNE, 1854.

TREATMENT OF SCARLET FEVER. The proper treatment of this disease has been the subject of two short communications in past numbers of the Journal. Since their publication we have received letters from some of its readers, urging us to give our own views on the subject. This we have neglected to do heretofore, hoping some one would save us the trouble; but having been treating cases of Scarlatina for the last six months, we have concluded to comply. In doing so we have no intention of inflicting upon our readers a prosy dissertation, to embrace well established facts in relation to this much dreaded malady.

The vexed question of contagion we leave to be discussed by those who like, and will confine ourself to a short exposition of the principles on which we found a plan of treatment which has in our hands been eminently successful.

We consider scarlatina a contagious fever, to be classed with the other contagious exanthemata, less contagious than small pox, more so than typhoid (continued) fever, or erysipelas.

Like all other eruptive fevers, it sometimes springs up where we have no reason to attribute it to contagion or infection, and appears, so far as our knowledge extends, to be self-developed. This may terminate as a sporadic case, or may be the starting point of a wide-spread epidemic; depending upon atmospheric vicissitudes and individual predispositions very imperfectly understood.

Its period of incubation may be considered from four to eight days. Dating from the first feeling of illness, the rash should begin to appear in twenty-four hours, and should begin to fade in four or five days from its first appearance. This may be considered the regular course of the disease, when it does its perfect work unembarrassed by accidents or injurious medication.

But the number of cases in which the true order of nature is followed is small, compared to those which are thrown more or less from their natural course by accidental vicissitudes.

On an early and perfect eruption depends the perfection of the disease and the safety of the patient. Not that there is *no danger* from the accidental local lesions so frequent during its progress, but that there is *no safety* when the eruption is imperfectly developed, has retroceded, or prematurely faded.

To allow nature to produce this eruption at the proper time, rendering aid when she is incapable, and withholding officious treatment, is the duty of the true physician.

No physician who has witnessed the graver forms of this disease can have overlooked the fearfully severe struggle which is going on from the first invasion to the perfection of the eruption. In most cases this struggle terminates in the triumph of nature and an amelioration of the sufferings of the patient upon the appearance of the rash; but the powers of the patient may not be sufficient, and the rash may fail to appear from three causes,—a hyperæmic condition requiring antiphlogistic remedies; an anæmic, demanding stimulants, and the irritated, which threatens the life of the child, from the destructive impression produced on the nervous centres through sympathy with the cutaneous disease.

Of the first of these conditions we purpose to say but little. Phlogosis has been the bane and depletion the remedy of medical writers for the last half century, and the disease under consideration has received its full share of antiphlogistic attention.

We have only to say we rarely find it necessary to resort to antiphlogistic treatment in scarlet fever. An emetic or laxative at the onset, which are very likely to be abused, and which will often be anticipated by the spontaneous effort of nature, are the principal remedies of this class found necessary in several epidemics of this disease which we have treated.

The anæmic condition, or that in which the vital powers were inadequate to perfect the eruption, has been that which has oftenest required our interference. In cases of this character we find a rapid, weak and small pulse, skin dry, not very hot, with little or no appearance of the rash after the expiration of twenty-four hours from the invasion of the disease.

The want of power seems most apparent in the vascular system, more especially the vessels of the cutaneous surface; and the great indication is to aid nature in her effort to throw out the rash by those remedies which determine to increased action of the cutaneous vessels. In a word, that class of remedies which we call diaphoretics.

But in choosing from this class we are to keep in view the condition of our patient, and choose that particular article which will act in harmony with the debilitated condition of the system; thus the Pot. Tart. of Antimony would be manifestly injurious; for, although a powerful diaphoretic, it is a decided anti-phlogistic, and acts powerfully to depress the vital powers. Ipecac is less objectionable, and in many cases and in some epidemics is the proper remedy; so often so, that nearly all our systematic writers recommend "a gentle emetic at the outset," as ordinarily safe and proper. This we consider as altogether too sweeping a suggestion; and that the administration of an emetic should be governed by the result of a careful inquiry into the condition of our patient; and only after a careful consideration of the question, Will the action of an emetic do most good by the tendency to promote cutaneous action, or harm by its revulsive effect, in determining from the skin to the gastro enteric mucous surface?

The diaphoretic which has proved in our hands the most safe and reliable in treating this class of cases, is the liquid acetate of ammonia. This we prepare extemporaneously, by neutralizing good cider vinegar with pure carbonate of ammonia; and as the carbonate is of itself little if any inferior as a diaphoretic to the acetate, we prefer a slight excess of this in the solution, and where the debility is very marked we allow this excess to be considerable.

This liquid acetate of ammonia is a diaphoretic, which produces its effect by a stimulant rather than an antiphlogistic action; and although an observer unfamiliar with this disease would perhaps hesitate in prescribing stimulants when the general symptoms are so decidedly febrile, yet an enlightened experience will show him that on them often depends the safety of his patient.

In many cases of this class the Dover powder is an invaluable remedy; and is a favorite prescription in ordinary cases is this, alternating with the acetate of ammonia, which in cases of ordinary severity will yield all the stimulant, diaphoretic and anodyne influence demanded; but we frequently meet with cases where as free an exhibition of the ammonia as a sound common sense will allow falls short of proving adequate to the wants of our case, and the use of the warm bath, and direct stimulation with pure spirit, is necessary to the safety of our patient.

Young children are often in imminent danger, both before and after the full appearance of the eruption, from the severity of the constitutional irritation which their immature nervous organization is unable to withstand. Frequently on the second day of the disease we may find our little patient showing little or no rash, but incessantly changing its position; tossing about the bed often to such an extent as to render it impossible to keep it covered. The same condition may arise also from a retrocession of the rash after its full appearance. Here a mild or expectant course would be sure to end in the death of the little sufferer; but a cool and judicious application of remedial measures will rarely fail. The warm bath and opium are our main hopes in these cases. The first tends powerfully to aid nature in perfecting the eruption; the second is indispensably necessary to keep the patient alive till this is accomplished, and bad luck to the timid practitioner who stops before quieting his patient, because he has given large and repeated doses of some anodyne without apparent effect.

In some of these cases a child of a few years will require as free an exhibition of opium as we would be willing in ordinary cases to direct for a much older patient; but the child *must* rest or its life will soon pass away; and the judicious physician who finds his patient in this state will not leave it till he has by frequent repetitions of a moderate dose brought it decidedly under its influence, where it must be kept by such additional doses as the exigencies of the case demand.

As an anodyne in these cases, we have found the valerianate of morphia the most satisfactory in its results. It is hardly necessary to say that the acetate of ammonia and stimulants are an indispensible part of our means of treatment in these cases, as well as those before mentioned.

But it is not only when the rash is imperfect that our patient may be found in an agony from nervous irritation. For a day or two after its full appearance the skin is in very much the same condition as if burned by the hot sun or with fire; and here also anodynes are often as indispensibly necessary. It is at this stage of the disease, and in the cases where the skin is dry and hot and no perspiration appears, that inunction is so very valuable, and it requires but little thought to perceive that exclusion of the air from the burned skin is the whole office of inunction. Such being the case the purest fresh lard is certainly the most proper article to use for this purpose. We consider bacon or any other sort of rancid or medicated grease as decidedly inferior.

The skin should be kept well protected by the lard till the rash begins to fade, or its necessity is superseded by a free perspiration; and we would here remark that we consider this or any other external application unnecessary and injurious in all cases where the skin is soft and the perspiration free.

We see many cases in which, if properly treated, the rash goes through its course accompanied by a free perspiration, and with little suffering from cutaneous irritation.

Especial care should be exercised to keep clear of anything which can interfere with the elimination of the materies morbi from the blood through the skin, and every action or neglect of action which can by any chance exert a derivative influence from the cutaneous surface should be carefully avoided.

To the use of *emetics* we have before alluded,—there are many cases where the operation of an emetic will rouse the system to throw out the rash, and have a decidedly beneficial influence; but we fear it is in the abuse of *cathartic* remedies that lies a greater mischief; the free operation of a cathartic at the forming stage of the disease can hardly fail, except in a decidedly phlogistic case; of cooling the surface and producing more or less retrocession of the rash. We would not be understood as sweepingly denouncing cathartics, but only their too frequent and indiscriminate use, for we have often seen the best effects from their proper administration at all stages, and are habitually using laxatives after the rash has faded and the danger of retrocession has passed away.

The external use of *cold water* has been recommended by good authority. We can readily understand that cases may occur in which the external application of water by sponging or the wet sheet of the hydropaths may prove beneficial, but with our views of the pathology of the disease we consider it a hazardous remedy. One of the worst cases we ever treated, was, we believe, rendered much worse than it would otherwise have been, by the free application of cold water, previously to coming under our care.

Of the complications and sequelæ of this disease, our limits do not allow us to speak, nor is it fitting we should. Their treatment is in accordance with well known and established principles, with which all are or should be familiar.

The same application of general principles must guide us in the management of our patient during convalescence; for with the disappearance of the rash, after having run its perfect course, ends the specific nature of the disease, and any functional or organic lesion which then manifests itself, must be treated very much as if arising as an original disease. The deficiency and morbid state of the urinary secretion and the accompanying dropsy will usually yield to appropriate treatment; but it occasionally happens that a multiplicity of local mischiefs exhausts the already debilitated patient to so great an extent as to preclude recovery.

We take the liberty to present the following cases, which have but just passed from our hands, as examples of the way we treat the ordinary as well as the desperate cases of this disease.

M. D——, a lad aged 9 years, was attacked on Sunday, April 30th. He vomited repeatedly during the day and night, the vomiting being accompanied by profuse diarrhœa. We first saw him on Monday, P. M. The evacuations had ceased and he was hot, dry, restless, with a slight appearance of rash about his neck and shoulders; pulse 140. He was ordered 3 grs. Dover powder every six hours, alternating with ʒ ij. liquid acetate of ammonia, sinapisms to the feet, cold water to the head if agreeable, to be kept well covered in bed, and to drink freely of warm catnip tea.

Under this treatment the disease progressed favorably, and he was convalescent on Friday, May 5th. During the first three days of treatment the fever was intense, with a perfect eruption, and considerable delirium at night, yet he rested so well at intervals that it was not deemed advisable to make any application to the cutaneous surface, and on the third day (fourth of the disease) the skin became moist with an amelioration of all the symptoms. The bowels moved once a day during the sickness, and after he became convalescent without any aid from cathartic medicines. The throat was badly swollen, so much so as to render deglutition difficult; the ung. hyd. bin. iod. was applied externally, followed by a bread and milk poultice. Internally, solutions of nit. argent, tannin, and capsicum in vinegar, were applied at different times, and during convalescence it was gargled with strong alum water.

The family consisted of this lad and two sisters of the ages of five and twelve years, who were constantly about their brother from the first invasion till they in turn were attacked; the younger on Monday, May 8th, the other on Friday, the 12th.

The younger was attacked with vomiting, which continued with great severity some five or six hours, when profuse diarrhœa occurred, as in the first case. When first seen on Tuesday, P. M., she was stupid, with a very rapid feeble pulse, skin moderately dry and hot, but no appearance of the rash. The vomiting had ceased but the diarrhœa continued for some hours longer. A course of treatment similar to that pursued with the brother was followed for twenty-four hours, but with no good effect. At this time her pulse was 160 weak and fluttering, very slight appearance of rash, indifference to external impressions, was tossing about the bed to such an extent that several attendants were necessary to keep her covered, swallowed when anything was put in her mouth, but this could only be done by watching an opportunity to insert a few drops from a spoon between her lips, as she was rolling and tossing about.

Although the case appeared hopeless, we determined to persevere while there was life. She was put in a hot bath made by a large blanket dipped in hot water, in which she was kept enveloped for 20 minutes, (to do this required the united strength of two strong persons,) and 30 drops of tr. opii. were administered in divided doses within an hour, with but slight apparent effect. We then prescribed gr. $\frac{1}{16}$ doses of valerianate of morphia, to be given every hour till she rested quietly, and then to be repeated as often as necessary, to keep her quiet, and to give a teaspoonfull of liquid acetate of ammonia every hour, spirit to be added if she appeared cold or sinking.

The next morning, (May 10th, 8 A. M.,) the rash was fully developed;

she had taken two doses of the morphia, and had rested considerably, but when not fully asleep was tossing about, and had no more general sensibility than the day before.

The medicines were continued, cold water applied to the head, and she was thoroughly greased with fresh lard every six hours.

8, P. M. Found her bed surrounded by mourning friends, waiting to see her expire, had taken no drink or medicine for six hours, as the parents thought she could not swallow. The incessant motion of her head, which could only be controlled by force, rendered it very difficult to get anything into her mouth. Taking her in our arms and holding her head still, we placed a cup of water to her lips; she drank with avidity; after this drink and medicines were introduced in this way and without much difficulty. The symptoms from this time ameliorated, the anodyne was needed less frequently, but the acetate of ammonia was continued freely till the rash began to fade, on the 13th, at which time sensibility began slowly to return, and she to manifest her wants by words, and on the 15th she was decidedly convalescent. A diuretic, composed of tr. squills, tr. camphor opiata and spt. nitr. dulc., with occasional laxatives completed the cure.

The older girl was attacked as were the others by vomiting and purging, but less severely. These symptoms had ceased when we first saw her.

She was ordered 4 grs. dover powder every six hours, with ʒ iij. doses of the acetate ammonia twice between, and to drink freely of catnip tea. Under this treatment, which did not require to be changed or modified for four days, the rash was perfectly developed, the skin never became dry, and she was convalescent on the 17th, having had a very mild run of the disease.

In closing we may be allowed to offer some objections which occur to us in reading the article of Dr. Cleaveland in our February No.

Dr. C. seems to regard the rash too much as an acute inflammation of the cutaneous tissue. From any such view we would dissent, for we can by no means acknowledge the eruption of this disease or that of Rubeola on Typhoid fever to be the result of inflammatory action. We consider it an effort of nature to throw off a materies morbi from the blood, and the subsequent desquamation of the cuticle as a result of morbid development of epithelial cells rather than a consequence of pure inflammation.

With the views of Dr. C. in relation to the use of emetics and cathartics we have of course no fault to find, agreeing as they do so nearly with our own.

General blood-letting would be practiced by no sane man except in such cases of plethora as are rarely found; we have never bled and never expect to.

The assertion that opium "tends to close up the outlets by which the morbid matter must be removed," we consider altogether too sweeping. That it diminishes the action of the bowels no one will deny, but if our fear of revulsion is well founded, this is a gain rather than a loss, and we have always been taught and yet believe that opium tends to promote increased cutaneous elimination, which is in our view the very object sought in this disease.

The local treatment of the throat should be governed by the application of those principles which are supposed to guide the practice of all educated physicians.

External stimulents and local internal applications are invaluble when applied by a judicious hand. While one throat will be most benefitted by the "antiphlogistic contact" of nitrate of silver, another will need to be roused to healthy action by the tincture of capsicum, and both may need gargles of tannin or alum at a later stage, and he who cannot distinguish whether his patient needs either or neither of these ought not to treat Scarlatina.

When an external counter irritant is needed, we prefer the ung. hyd. bin. iod., followed by a big bread and milk poultice. This will rarely if ever cause the unhealthy sores so liable to follow the use of cantharides in eruptive fevers.

PRIORITY IN THE MEDICATION OF THE LARYNX AND TRACHEA, is the title of a pamphlet by HORACE GREEN, M. D., reprinted from the American Medical Monthly.

We had intended to express our own views on this question of *priority* ; but the following, from the pen of Prof. Bowling, of the Nashville Journal, tells the whole story so clearly that we prefer to copy it entire :

> "To Dr. Horace Green, of New York city, it is not saying a whit too much, is practical medicine of this age more indebted for real progress and improvement than to the aggregate mass of all its cultivators beside. Medical nature is too far tinctured with the *human* to see a brother rise so high 'and blaze with a rapture so divine' as to illumine with its cheering rays the civilized earth, and not feel a desire to 'put out the light.' God be praised that there are but few of these extinguishers, whose love of darkness is only equaled by the darkness of their deeds. It is known to all who have kept pace with the progress of medical matters in this country, that Dr. Horace Green, of New York was not only the first to propose and execute the intromission of a probang and medicated sponge into the glottis, and wind-pipe, but that some of his professional brethren of that city were the first to deny publicly the practicability of such an operation.
>
> On the 19th of September 1840, Dr. Green reported fifteen cases of Laryngitis to the New York Medical and Surgical Society, treated by means of a strong solution of nitrate of silver, applied directly to the mucous lining of the glottis with a sponge probang. Dr. John G. Adams of New-York was the secretary of the society, and recorded the report of Dr. Green on the books of the society with his own hand. From 1840 to 1847, it was repeatedly and publicly denied in New York, and by members of the above society, that the proposition of Dr. Green, to cauterize the interior of the larynx, was practicable. In the mean time Dr. Green had

written a book upon the subject, explaining the advantage resulting from this mode of treatment. After the publication of his work, a committee of the above society was appointed, with Dr. J. A. Sweat chairman, to inquire into the matter, who reported Dr. Green's practice to be a 'dangerous and unwarranted mode of treatment.' Thus conceding the 'practicability,' which they had so long denied. But dear was the price at which they held this concession, not voluntarily made, but wrung from them by accumulating and undeniable facts. The secretary, Dr. Adams, and twelve other members, making in the aggregate an immortal "*thirteen*," introduced and carried in the society, the following preamble and resolution :

"Whereas, Dr. Horace Green has rendered himself disagreeable to a majority of the members of this society, therefore resolved, that he be requested to withdraw from the society." So Dr. Green was killed off. But whether from inherent perverseness, or feline tenacity of life, or the mendacity peculiar to some patients, from which they arrogantly pretend to be alive, when the doctors, in solemn conclave assembled, have pronounced them dead, Dr. Green would not consent to enter the tomb, but being persecuted by the Jews, lo! he turned to the gentiles, a convert to the faith that a prophet hath honor save in his own country. His work was favorably reviewed by the leading British and Continental Journals, the "British and Foreign Medical Reviews" adding, "We have adopted this mode of treatment recommended by him, and can corroborate his statements as to its great value. Cases of pulmonary affections have in our hands been brought to a satisfactory termination, which we are quite sure, under the treatment ordinarily adopted, would have terminated fatally." The "London Medical Gazette," after alluding to the French pathologists in this connection, in a review of Dr. Green's book, says : "Dr. Green was the first to extend its use successfully to parts *below* the epiglottis in various inflammatory diseases of the vocal organs." The "Dublin Quarterly Journal of Medical Science" says, in conclusion of a review, "We shall only say, that we are fully convinced of the originality of observation displayed by our author, and of the perfect truth of the statements contained in his treatise."

In 1851 Dr. Green was in Edinburgh, when the celebrated Dr. Bennett requested him to visit the Royal Infirmary with him and to perform his operation on several patients in Dr. Bennett's ward, who were suffering from laryngeal phthisis. An account of this visit of Dr. Green to the Royal Infirmary, and the extraordinary success of his applications by his peculiar mode, is given in Braithwaite's Retrospect, No. XXIV, page 99.

After all this, one would suppose that Dr. Green would be permitted, as Nicholas said in regard to the Porte, "to remain in repose, free from the bickering of diplomacy." Far from it—now that the "practicability" of his operation is demonstrated every where, and that it is *not* "a dangerous and unwarrantable mode of treatment," but one which brings cases to "a satisfactory termination which under the treatment ordinarily adopted would have terminated fatally," his old friend, one of the immortal "thirteen," and secretary of the society which threw him out of the synagogue, Dr. JOHN G. ADAMS has discovered, that, admitting the thing can be done, and further, that it ought to be done, and that it is a great improvement in medicine, yet Dr. Green *is not the author of it!* When Dr. Green's statement was published in regard to the new method, he was branded with publishing a falsehood, and claiming to have performed an impossibility. When the practicability was demonstrated, the method was assailed as "dangerous and unwarrantable." When demonstrated to be safe and efficacious, the authorship is denied him!

Dr. John G. Adams writes a letter to the editor of the "Gazette Hebdomadaire de Medecine et Chirurgie," which was published in that periodical in January last. In this letter, Dr. Adams states, what he says he can affirm "after conscientious (!) investigation," "the history and practical details" of this method. He says the instrument was invented by Dr. *David* Green. That Dr. Buck of the New York Hospital made some improvements upon it, which were finally perfected by Charriere of Paris. He then asks, "Who first made use of this instrument to carry a caustic solution into the larynx?" "In France," says Dr. Adams "the possibility of introducing the sponge into the larynx even has been doubted—*I have however fully proved this fact three times in the most formal manner*"! Dr. *David* (*not Horace*) Green invented the instrument, and though the "practicability" of introducing the sponge into the larynx has been doubted in *France*, (never we suppose in New York!) Yet *Dr. Adams* has "fully proven the fact three times in the *most formal manner!*"

After this blow, it is to be hoped that Dr. Green will no longer struggle against fate, but, recommending his soul to the Lord, quietly consent to kick the bucket."

NEW YORK STATE LUNATIC ASYLUM. We have received the Eleventh Annual Report of the managers of this Institution for the last year. There appear unequivocal manifestations of a spirit of liberality in its management which cannot fail to result in its prosperity. The board of managers gave the superintendent, DR. BENEDICT, leave of absence without deducting from his salary, that he might spend the winter in a milder climate with the hope of restoring his impaired health. This was to their credit, and we doubt not for the best interest of the institution. It is not the best economy to wear out valuable public servants as we would oxen or horses, for they are not quite as easily replaced.

PROFESSIONAL COMPLIMENT. The class of students who attended the lectures on the Anatomy Diseases, &c. of the Eye, by Dr. MARK STEPHENSON, in New York city, during the past two winters, have presented him the case of eye instruments which were exhibited at the "Crystal Palace" by the celebrated French cutler, Luer.

VIRGINIA MEDICAL AND SURGICAL JOURNAL. We have not seen a copy of this valuable Monthly since December. How is it, friend Otis, has the Virginia Medical Society absorbed you as well as the Stethoscope?

CONDENSED SUMMARY.

Chloroformization and then Enemata in a case of Ileus. In a recent case of ileus, in which narcotics and drastics were used without avail, it occurred to Dr. Merz to put the patient first under the influence of chloroform, to relax the spasm, and then inject air into the bowels. The relief is said to have been immediate and complete.

Depression of the Skull elevated in a Child by the Cupping Glass. This we have noticed before. A Dr. Nicholls, of the Langford Union Infirmary, Great Britain, finding the cupping glass did not fit the oval surface of the head, he fixed it by making an embankment of common glazier's putty, and at once succeeded in raising the depressed bone (portion of the occipital and parietal) in a child two years old, by exhausting the air from the cup. The symptoms of compression passed off, and the little patient recovered.

Creosote Injections in Leucorrhœa. M. Arendt, a German physician, states that he has generally been able to cure ordinary cases of lencorrhœa in three or four days by weak injections of creosote. He uses two drops to the ounce of water, repeating twice or thrice a day. Some mucilage, we think, ought to be added, to make this a proper mixture.

Ice to the Neck in Croup. Dr. Borchman proposes folded linen as a cravat, dipped in ice water, wrapped around the neck with small bladders containing fragments of ice, applied to each side of the neck, while the limbs are covered with warm flannel, and kept so by bottles filled with hot water. These applications he renews every half hour. This treatment was continued in a case from 3, A. M., to 8, P. M., when the bladders of ice were omitted. It is stated that immediately after the first application, the heat of the head, agitation and distress diminished, the cough ceased, and the patient fell asleep.

Dr. Edwin N. Chapman, of Brooklyn, N. Y., publishes a case of Membranous Croup treated with caustic to the larnyx trachea. We have seen several very striking cases of this disease *cured*, by the application of a strong solution of nitrate of silver, by means of a sponge, into the larnyx and trachea, after the ordinary remedies had failed.

Rubeola. Dr. Walz has employed, after the manner of Schneeman, frictions with fat, in 343 cases of measles, fifty-seven of which were severe; all were cured very speedily. In thirty of these cases, the patients were tuberculous, and the progress of phthisis was arrested.—*St. Louis Jour.*

THE

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REMARKS ON CROUP AND ITS TREATMENT.

BY HORACE GREEN, M. D.

THE extent of the fatal cases of croup which have occurred among children, in the city of New York, during the last year, is almost without a parallel in the history of this affection.

The whole number of the fatal cases of this disease which, according to a statement furnished by the City Inspector, occurred in New York during the year ending February 28th, 1854, was *six hundred and eighty!* The subjoined table contains a statement of the number of deaths from croup in each of the months of the above-mentioned year; and, also, columns to exhibit the relative proportion of males and females out of the six hundred and eighty fatal cases.

		Males.	Females.	Total.
1853.	March	34	36	70
"	April	29	26	55
"	May	27	22	49
"	June	28	14	42
"	July	13	15	28
"	August	21	11	32
"	September	15	21	36
1853.	October	38	43	81
"	November	31	39	70
"	December	47	42	89
1854.	January	28	39	67
"	February	33	28	61
		344	336	680

Undoubtedly, this disease, like many others, is influenced by atmospheric peculiarities, so as to assume, occasionally, an epidemic character, and, in certain seasons, to exhibit a great increase in its prevalence. As the various forms of angina have been more or less aggravated during the past season, it is not improbable that atmospheric peculiarities have also served to increase the frequency of croup.

We have no means of comparing the preceding statement of the fatal cases of croup, with the statistics of deaths from this disease in other places during the same time; but, on referring to an article published in the London Medical Gazette for 1850* on the subject of croup, we find that, in a population nearly fourfold greater than that of this city,† the average number of deaths from croup, during a period of eight years, in London, was less than three hundred and eighty a year. The number of deaths from croup in the whole State of Massachusetts, in 1851, according to the Registration Report for that year, in a population, at that time, of about one million,‡ amounted to four hundred and eleven. During the same year, in Suffolk county (which county includes Boston, Chelsea, &c.,) with a population amounting to 145,000, the deaths were ninety-two.

It will be recollected, that at the census of 1850, the population of Kentucky was very near the same in amount with that of Massachusetts.‖

It is a little remarkable, diverse as are the climate of these States, that, with a population nearly equal, the number of fatal cases of croup should be uniform. In 1852, according to the annual Report of the Registration of births, marriages and deaths in Kentucky, for the above year, the deaths from croup were four hundred and sixty-one; just fifty more than occurred in Massachusetts during 1851.

In Philadelphia, the mortality from croup, in the five years preceding 1846, was seven hundred and fifty-six; or an average of one hundred and fifty-one a year,§ in a population which, at the census in 1850, amounted to 121,376.

These brief statistics will afford us some idea of the ordinary annual mortality from croup in some of the larger cities, and in different climates, and will exhibit, also, especially in comparison with London, the frightful mortality caused by the disease in New York during the last year.

It is now nearly fifty years since Napoleon issued, from the head quarters of Finkenstin, his celebrated general order—"d'ouvrir un concours sur la maladie connue sous le nom de croup," and offered a prize for the best essay on the nature of this disease, which served to awaken a new interest on the subject throughout the whole of Europe; and was the occasion of eliciting many learned, elaborate, and highly interesting works on the nature and treatment of this terrible malady. From that time to the present, these inquiries have been pursued, in this country and in Europe, by eminent medical men, and the results published to the world; but, has a plan of treatment yet been discovered, recommended, and adopted generally, that has had the effect to abate the severity of the disease, or, in any considerable degree, to lessen its fatility?

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* London Medical Gazette, vol. x., p. 542.

† The number of the inhabitants of London, at the last census, was 2,632,236. In New York, in 1850, it was 515,547.

‡ At the census in 1850, the population of Massachusetts was 994,514. That of Boston proper, 136,881.

‖ The population of Kentucky was 985,405.

§ Dr. Meigs on the Diseases of Children, p. 84.

In that excellent treatise on croup, by Dr. John Ware, of Boston, the author declares, that "the received mode of treating the disease," which is very much the same for all varieties, "has come down to us by a sort of tradition from our predecessors in the profession, and varies but little, if at all, from that which was originally adopted when the disease first became the object of attention. * * * In the main, emetics and bleeding, blisters and calomel, have been the principal remedies. The depleting, reducing, and perturbating method is that upon which dependence has been chiefly placed."*

This is, indeed, true, for it must be admitted that, whilst in the management of many other diseases great improvements have been made during the last half century, in the traditionary treatment of this affection no modifications have been generally adopted which have served to diminish, in any amount, the number of fatal cases. On the contrary, the disease is admitted by the best and most recent authorities, to be not only progressively on the increase, but, so far uncontrolled by the ordinary therapeutic measures, as to prove fatal in nearly one half of the whole number of those who are the subjects of this affection.†

These unfortunate results, which, in the statistical records of croup, have followed the ordinary mode of treatment, will be found to have been in no degree more favorable in the history of the disease as it has occurred in our city during the past winter; and we do not hesitate to avow our firm conviction, that the employment of the reducing and perturbating plan of treatment, a plan recently recommended by more than one eminent writer, and still employed by many practitioners, has destroyed more lives, among young children, altogether, than it has been instrumental in saving. A work, by an eminent English writer, has recently been republished in this country, which has met with a very favorable reception from the profession generally, and has received the commendation of the reviewers, in our medical journals; and yet, the method urged by the author, in his "Lectures on the Diseases of Infancy and Childhood,"‡ as the appropriate plan for the management of membranous croup, if fully carried out in the treatment of the disease, would prove fatal in its results, as we conscientiously believe it has done, in more instances than it has proved remedial. That we may not be misunderstood in our remarks on this heroic plan of treatment recommended by Dr. West, and employed, to a great extent, by many practitioners in this country, we shall take the liberty of giving a brief statement of the thereapeutic measures by him adopted.

In cases where an attack of croup "is merely apprehended, but where catarrh exists, attended with a slight, ringing cough," Dr. West recommends that the child "be confined to the bed-room, be placed on a spare diet, and should take an emetic of ipecacaunha and antimony, to be followed by some mild diaphoretic medicine containing small doses of antimonial wine."*

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* Boston Medical and Surgical Journal, vol. xlii., p. 261.

† Traité du Croup, par M Double, p. 479.

‡ Treatise on the Diseases of Children, by Chas. West, M. D.

But, should the disease have attained its full development before the patient comes under the notice of the physician; or, should its access be violent, a far more energetic plan of treatment is advised by Dr. West. "The abstraction of blood, and the administration of tartar emetic, are the two measures on which your main reliance must be placed; and you must bleed largely, and give tartar emetic freely, remembering that if relief do not come soon it will not come at all—that there is not danger only, but death in delay. I have never met with an exception to the rule which prescribes the free abstraction of bloed in every case of severe idiopathic croup, when seen at an early period, and before the purple lips, and livid countenance, and failing pulse, announce the long continuance of a serious obstacle to the free admission of air into the lungs. Even in very young children local depletion forms, in these cases, but a poor substitute for general bleeding; for it is not merely the abstraction of a certain quantity of blood that is needed, but its removal in such a manner as most speedily to produce an effect on the system. Bleeding from the jugular vein is preferable, under these circumstances, to venesection in the arm, since the latter often fails in children under three years old; and the blood never flows so freely as when taken from the jugular vein."†

After bleeding "largely" from the arm,—or, what Dr. West considers preferable, "in very young children," from the jugular vein, *because*, in children under three years of age, "the blood flows more freely when taken from the jugular vein,"—the free administration of tartar emetic is recommended. To accomplish any real good by means of this medicine, "it must be given," says Dr. West, "in doses of an eighth, a quarter, or half a grain, every ten minutes, until vomiting is produced; and the same doses should afterwards be continued every half hour, until decided and permanent relief has been afforded." If the medicine, when administered in the same amount as at first, fails after a little to excite vomiting, it is advised by the author to increase the dose until this effect is fully produced. The antimony thus administered is to be continued for four or six hours, when, if "no satisfactory measure of improvement should have yet appeared, local depletion may be resorted to, or possibly a repetition of general bleeding may in some cases be ventured on."‡

Later in the disease, calomel, in combination with ipecacuanha, is administered every hour or two hours, "but interrupting its use at intervals in order to give an antimonial emetic;" and, finally, these active therapeutical measures above enumerated having been thoroughly tried, and tried in vain, Dr. W. advises that a totally different plan of treatment be at once adopted. "If antimony cease to vomit," he remarks, "or if it be rejected immediately, and without effort, the fluid thrown up being unmixed with phlegm or false membrane, while the temperature sinks, the lips grow more livid, the pulse more frequent and feeble, and the paroxysms of dyspnœa are undiminished in severity; or, if the respiration, though less laborious, be attended with a sibilant, instead of a stridulous sound, it is evident that by continuing the medicine we may destroy the patient, but shall fail to cure the disease."

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* Diseases of Infancy and Childhood, by Chas. West, M. D., 221, Philadelphia edition.

† Ut supra, p. 221.

‡ Op. citat, p. 222.

Under such circumstances, "an attempt must be made to arouse the child from the state of collapse into which it is sinking, by placing it for a few minutes in a hot mustard bath, and emetics of the sulphate of copper should at once be administered."* If, to the therapeutic measures already enumerated, we add that of the use of mercury, which, in addition to its occasional administration at an earlier period, is to be employed at that stage of the disease when the patient "seems sinking into a state of collapse," and under these circumstances to be fully employed, by means of its internal administration, every hour, "while at the same time a drachm of strong mercurial ointment may be rubbed into the thighs every two hours," in order to bring the system as speedily as possible under the influence of mercury," together with the application of "a blister to the throat"—if these measures are included, we repeat, they constitute the plan of treatment strongly advocated by Dr. West, and employed by many practitioners, both in Europe and in this country, for the treatment of membranous croup. "Emetics and bleeding, calomel and blisters," *Medicina agens et perturbans*, the Sangrado, traditionary treatment of the last half-century! We can hardly imagine a plan more likely to prove unsuccessful, when fully carried out, than the method of which we have spoken; and if we consult the records of this plan, we shall find that, where it has been adopted, this opinion of its effects will be entirely sustained by the results which have followed its employment.

A similar method, though in some degree less heroic, is advocated by Dr. Meigs, of Philadelphia, in his recent work on "The Diseases of Children."† In a "summary of the treatment," Dr. Meigs suggests "the following plan of treatment, to be pursued in children about or over two years old, when we are called in good time: to take from the arm three or four ounces of blood, once, twice, or three times in two days, according to the strength of the child, and the degree and obstinacy of the fever. In both forms of the disease, emetics, and I would recommend alum in preference to any other, should be given once at least, very often twice, and, in violent cases, three or four times in the twenty-four hours, so as to produce vomiting attended with a good deal of effort. To give, at the same time, from one to two grains of calomel, with a quarter or half a grain of Dover's powder, every two hours, taking care not to give a dose for an hour before nor after the time selected for the exhibition of the emetic. In cases in which there is loud stridulous respiration, heard both in the inspiration and expiration, in which previous treatment has had no effect, and in which there is threatening of speedy death, we may give two grains of calomel every hour, until three or four doses have been taken, and direct the exhibition of an alum emetic after the last dose, or resort to tracheotomy."*

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* Op. citat, p. 224.

† A Practical Treatise on the Diseases of Children. By J. Forsyth Meigs, M. D., &c., second edition.

Certainly, in one respect, this "plan of treatment" is characterized by a great improvement on the wholly reducing and prostrating method ordinarily adopted;—namely, in substituting alum for antimony as the emetic in the treatment of the disease. His reasons for this are as follows: "Antimony, when resorted to as frequently in the disease as I am of the opinion emetics ought to be, is too violent in its action; it prostrates many children to a dangerous degree, and is, I fear, in some cases, itself one cause of death."†

If, then, these positions, with regard to the generally-adopted, reducing plan of treating croup, are tenable—and in confirmation of these views we challenge inquiry into its history—is it not time for the thinking, *progressive* portion of the profession to conclude with Dr. Ware, "that the methods of treating this disease in common use require a careful reconsideration"?

That there is a method of treating croup, which every practitioner may, if he will, adopt, and which, if promptly and appropriately employed, will arrest the disease in a very large proportion of cases, we unhesitatingly aver.

In 1848, the writer published a small treatise, "On the Pathology of Croup, and its Treatment by Topical Medications," in which the declaration was made that, "the practice of making topical application of medicinal agents into the larynges of young children, for the treatment of membranous croup, is a plan entirely practicable, safe, and, when judiciously employed, *in the highest degree efficacious.*" This method of treating a disease hitherto so unmanageable, was founded upon the following propositions, which were then advanced, with regard to the pathology of the disease, namely: That the essential characteristics of true croup "consist in an inflammation of the secreting surfaces of the fauces, larynx, and trachea, which is always productive of a membranaceous or an albuminous exudation.

2. "That the membranaceous concretion, which is found coating the inflamed mucous surface of the parts in croup, is an exudation,—not from the membrane itself, but is secreted by the muciferous glands, which so abundantly stud the larynx and trachea.

3. "That the exudative inflammation commences, invariably, in the su-

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* Op. citat, p. 103.

† Op. citat, p. 97.

perior portion of the respiratory passages, and extends from above downwards,—never in the opposite direction."

Since the publication of the work in which this mode of treatment is advocated, the author has had the opportunity of treating many cases of croup on the plan deduced from this view of its pathology; viz., by means of topical medication,—not only in his own practice, but in the practice of, and in conjunction with, other members of the medical profession; and with an amount of success that has afforded a high degree of encouragement and satisfaction.

He has also received from medical men, in different parts of the United States, as well as from numbers in Europe, the history of many cases of membranous croup, wherein topical measures, in their hands, have proved effectual in arresting the disease. In view of the great fatality, on the one hand, which constantly attends this disease, as ordinarily treated, and on the other, of the prejudice against the local treatment, which is still entertained by many, especially of the older members of the profession, the author does not feel at liberty to withhold from his professional brethren this abundant and most conclusive testimony in favor of topical medication in the treatment of croup.

It will not avail, for the cavilling opposer of this method of treating the disease, to rebut all testimony in its favor, as many in the profession, who, having always refused to try the plan, have persisted in doing,* with the assertion, that the cases of croup which have recovered rapidly under local treatment "were not cases of true membranous croup, but those of a spasmodic, or catarrhal nature, such as would have recovered under almost any treatment;" for, in many instances the employment of nitrate of silver, in the treatment of croup, has been adopted with great success, by eminent practitioners, who had, previously, had extensive experience in the management of the disease, but who, before the employment of topical medication, had treated, unsuccessfully, a large number of cases by the ordinary "depressing, depleting, and disturbing remedies." This was the case, as with many others to whom we could refer, with the distinguished Dr. John Ware, of Boston, to whose experience, in the different modes of treating this disease, and the conclusions to which he has arrived, we shall now briefly allude.

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* In a case of membranous croup that occurred in this city, the history of which was received from the attending physician, a prominent surgeon was called, by request of the family, in consultation. The case had advanced, until the symptoms were very urgent, and prompt measures were demanded, to save the life of the child. The physician in attendance proposed cauterization of the parts, rather than tracheotomy. The consulting surgeon positively refused to aceede to the adoption of this plan, on the ground, that it was a dangerous, and, in such cases, a worthless measure. The physician, however, persisted in his proposal, and the surgeon retired. Cauterization of the larynx was then promptly and perseveringly employed, and by this means the life of the child was saved.

It is well known to the reading members of the profession that several years ago Dr. Ware published his "Contributions to the History and Diagnosis of Croup"—a work evincing more scientific research, and containing more information with regard to the true pathology of membranous croup, than all that had been previously written in America. In these papers, Dr. Ware refers to thirty-nine cases of what he denominates membranous croup, which were noticed in his own, or in the practice of his friends. Of these cases the state of the fauces was observed in thirty-three instances, and "in thirty-two a false membrane was present; most frequently, and sometimes only, on the tonsils, sometimes on other parts also, as the palate, uvula, and pharynx. In one case no such membrane was present; but it was found to exist in the larynx after death. These thirty-three cases were treated by the ordinary therapeutic measures; and of the whole number, *three* only recovered—in thirty, the disease proved fatal. It is not at all surprising that, under these circumstances, Dr. Ware, eminent for his careful investigation and conscientious inquiry after truth, should have become "confirmed in the opinion," as he subsequently declares himself to have been, "that the methods of treating this disease, in common use, require a careful reconsideration;" nor that he should have propounded the question, "If the mode of treating croup commonly adopted, does no good, are we sure that it does no hurt?"

Having concluded, after the experience to which we have referred, to treat the disease "without the persevering use of the heroic remedies," Dr. Ware subsequently adopted a method in which "the treatment consisted—

1. "In the absence of all reducing, depleting, and disturbing remedies.

2. "Keeping the patient under the full influence of opium combined with calomel.

3. "Constant external application of warmth and moisture [to the neck], and of mercurial liniment, slightly stimulating.

4. "Constant inhalation of watery vapor."

In March, 1850, Dr. Ware read before the Suffolk District Medical Society "Additional Remarks on the Treatment of Croup," in which paper he refers to five cases of membranous croup, three of which were treated on the method indicated in the preceding propositions. The history of these five cases, as briefly narrated by Dr. Ware, with the conclusions to which he has arrived, we shall take the liberty of giving in his own words.

"The first case was that of a male, four years old, who was taken with membranous sore throat, accompanied by high constitutional irritation, Oct. 14, 1845. No croupy symptoms appeared till Oct. 18, when they were manifested in a perfectly distinct manner. On the 20th and 21st, patches of false membrane, with bloody sputa, were raised—and one piece of four inches in length. The raising of the latter was accompanied by a severe and suffocative paroxysm of coughing. On the 22d he died, eight days from the commencement of the disease and four from the access of croup. The suffering in this case was very considerable, but far less than I have been accustomed to witness in cases of croup treated according to the ordinary method."

"The second was that of a female, four years of age, taken with croup on the 8th of Nov., 1845. No depleting or reducing remedies were employed. Patches of membrane, and one piece of considerable size, were brought up on the 10th, and a few following days. She never suffered much, improved steadily, and on the 15th seemed well in all respects except the voice, so that on the 16th I did not see her. On the 17th there was a return of all the croupy symptoms, including the appearance of lymph upon the tonsils, and she died on the night of the 19th, eleven days after her first seizure. During no part of the disease was the suffering from dyspnœa very intense for any continued period.

"On dissection, the usual appearances were found, and in one lung the false membrane extended for some distance into the bronchi in the substance of the organ."

"The third case was a female, six years of age, who was seized with the disease Oct. 31, 1847. The onset of the disease was gradual, yet quite distinct. Nov. 2d, the symptoms had become quite severe; and Nov. 3d, there was bloody expectoration, and pieces of membrane were spit up. Pieces of membrane continued to be found in the sputa for several days, and she was very comfortable and breathed with tolerable ease, yet never losing the distinct croupy sound of respiration and voice. She retained some appetite and sat up and amused herself, as usual. On the 8th, she became rapidly worse, but without distress, and died on the 9th, quite easily, ten days from the first attack of the disease.

"It will be admitted, I think, that these cases, especially the two last, exhibited certain differences from the common course of this disease, which indicated a favorable influence from difference of treatment.

"In all of them the membrane was thrown up in considerable quantities.

"In all of them the disease was attended by very much less distress than is usual in croup, and, in two, there was so decided a mitigation of symptoms following the separation of the membrane, as to lead to considerable hope of a favorable termination.

"In two, at least, the disease was prolonged to at least twice its average duration under the usual treatment.

"In the two other cases, to which reference was made, the same general course of treatment was followed, with the addition of the introduction of a sponge, wet with a solution of the nitrate of silver, into the larynx. In each of these cases the application was made as early in the disease as I became satisfied of its distinct character. It was repeated morning and evening. It decidedly gave relief to the breathing, soon after each application, and both cases ultimately recovered perfectly. For the suggestion and adoption of this valuable addition to our means of treating this formidable disease, we are indebted, as is well known, to the enterprise of Dr. Horace Green, of New York. The profession, I think, owe to him a large debt of gratitude, for the energy and perseverance manifested in the introduction of this remedy, and I am the more disposed to render this tribute to him, because so many attempts have been made to detract from his merit in relation to it.

"I am well satisfied, from what I have now seen of this method of treating croup, as compared with that which has been followed for so many years, that it has the advantages which were pointed out in one of the preceding papers. It is a disease which I would treat without depletion—except, perhaps, by a few leeches—without vomiting, without purging, without blisters, without antimonials, ipecac., and all those other nauseous remedies which have been usually resorted to. I would trust to opiates, perhaps calomel, emollients, and the local application of the nitrate of silver.

"I ought to add that many of my friends in the profession have informed me of cases in their practice, treated on these principles, which have recovered in a favorable manner."*

Since the publication of Dr. Ware's papers, cauterization of the larynx, in the treatment of membranous croup, has been adopted by large numbers of medical men in New England, from many of whom we have received communications on this subject, expressing their full confidence in this therapeutic agent, when timely and appropriately employed in the management of croup.

Should we give a history of a tithe of these cases, which have been thus reported to us, they would occupy a much larger space than can be appropriated to this subject in the pages of the MONTHLY. In many instances—and this is the testimony of large numbers of practitioners, experienced in the disease—the morbid process has been promptly arrested, by topical medication to the surface of the tonsils and pharynx without the introduction of the sponge-probang into the larynx.

If the proposition, with regard to the pathology of the disease, be admitted, namely:—that the exudative inflammation in croup commences invariably, as a general rule, about the fauces and upper portion of the respiratory tubes, and extends from above downward, it must be apparent that no remedy can prove so effectual in arresting the morbid process as cauterization.

That this is the true pathology of the disease has been fully established, not only by many impartial observers, but also by the success which has attended the practice founded upon this view of its nature: it is, moreover, so declared to be by some of the most eminent and experienced pathologists of the present day.

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*Boston Medical and Surgical Journal. Vol. xlii., pp. 267, 268.

"In true croup," says Rokitansky, "which is essentially a disease of childhood, the exudative process often affects the throat and pharynx, and it extends from the epiglottis through the larynx and trachea—in some instances to the minute ramifications of the bronchial tubes—but the points it most commonly attacks are the larynx and trachea."*

Prof. Hasse, also, whose late work on Pathological Anatomy has been translated and published by the London Sydenham Society, observes, with regard to the exudatory inflammation of croup, that its progress is invariably from above downwards, and that it never spreads in the opposite direction. "This law is so universal, that where plastic inflammation occurs in the bronchi of the adult, as the concomitant of pneumonia, it can only descend to the pulmonary cells, never mount to the larynx."†

Still farther to sustain these views, not only of the nature of the disease, but of the positive efficacy of topical treatment in every stage of membranous croup, we shall proceed to adduce further testimony on these most important points.

In a recent number of the "*Archives Générales de Medécine*," is an interesting memoir by M. Vouthier, on the history of croup, as it occurred in an epidemic form in *L'Hôpital des Enfants Malades de Paris.*

In this paper are the details of several well-marked cases of membranous croup, which were treated successfully by "emetics and cauterizations;" and although in these instances the argentine solution was not conveyed into the larynx, but was applied only to the fauces and pharynx, yet the patients recovered perfectly under the treatment.‡ Although the cases thus treated are characterized as having been very severe—"trés-intense"—yet, as the treatment was early adopted, it is probable that the exudative process had not extended into the larynx; for, in the same paper is a history given, of five other cases of membranous croup, in which the disease, having reached the larynx, was not arrested by cauterizations. This measure was employed, as in the other cases, but no attempt was made to pass the instrument below the epiglottis. Tracheotomy, however, was resorted to in all these five cases, but every patient died. Efficient cauterization of the larynx, we maintain, would have saved three, if not more of these last cases.

A few weeks ago, a physician from the interior of one of our South-western States, called on us to state his experience in the treatment of croup by local measures. Two or three years before, he had passed several weeks in our city, and had then seen, for the first time, the employment of topical medication for the treatment of laryngeal and bronchial diseases. Returning to his home in the West—a region noted for the frequency with which croup occurs among children—he commenced at once to put into practice the new method of treating disease, with which he had recently become acquainted. During his previous practice, he had treated many cases of croup in the ordinary method, and the proportion of deaths, in his experience, as he stated, had been quite equal to one-third of the whole number attacked. But since the adoption of topical medication, during the two or three years after his return, some fifteen cases, he affirmed, had come under his observation, and were treated by cauterization of the fauces and larynx, *every one of which recovered.* The plan adopted by this physician was the same as that, to which we shall briefly refer, at the close of this paper.

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* A Manuel of Pathological Anatomy. By Karl Rokitansky, M. D. Sydenham Edition, vol. IV., pp. 20, 21.

† An Anatomical Description of the Diseases of the Organs of Circulation and Respiration. Sydenham So. Edition, p. 276.

‡ Archives Générales de Medécine. Tome xix, art. 1st.

As before asserted, since the publication of our work on croup, we have received similar verbal statements, in favor of topical medication, from physicians resident in almost every State in the Union; but we have also abundant *written* testimony on this subject.

The following cases from Prof. May, of Washington, who is one of the most distinguished of American surgeons, will be read with much interest.

Washington, April 30th.

My Dear Sir:

I herewith enclose you a hasty and brief account of the cases of cynanche trachealis, in which I have used the strong solution of nitrate of silver, as recommended by you in your work on croup. The statement of these cases is not as full and satisfactory as I could have desired, owing to the partial notes hastily taken by me at the time of their occurrence; but the result, in several of them, fully sustains the great value of the local agent recommended by you, to arrest this formidable disease, and which you have been, I believe, the first to bring fully to the consideration of the profession.

I am very truly and respectfully yours,

JNO. FRED'K MAY.

Case 1st.—On the 2d Jan. I was called on to visit a son of Mr. C., of this city, aged about ten years, whom I found laboring under symptoms of croup. The child had been complaining of some uneasiness about the throat, with hoarseness and slight cough, a day or two before I saw him. At my visit, his respiration was difficult, and there was a good deal of tenderness about the tonsils and fauces, which were inflamed. There was considerable febrile action, and the little patient was very restless, and the voice quite hoarse. I directed an emetic, to be followed by an active mercurial cathartic, his bowels being constipated, and such local applications, both internal and external, as I thought most likely to give relief.

At my visit next day, I found my little patient no better, but, on the contrary, his symptoms were more unfavorable and alarming. His respiration was very difficult, and his countenance expressed great suffering and anxiety. He could not remain more than a few moments in a horizontal position, but was raising himself up continually, and stretching backwards the head to obtain relief. In a word, the difficulty of respiration was extreme. He was very hoarse, his pulse very hurried, and the throat and tonsils more inflamed than at my previous visit. The symptoms of diptheritic croup, which had been epidemic in our city the year previous, were very decided. I at once resolved to try your method of introducing a strong solution of argent nitrat. into the larynx—everything else having been tried by me, in this disease, the year previous, not excepting tracheotomy, with but little success. The symptoms were very urgent. I felt satisfied that, unless soon relieved, the case would probably end fatally. I had no instrument sufficiently small for the object I had in view, and I therefore bent a small piece of ash stick to the proper curvature, and secured to the end of it a small piece of sponge, which I saturated thoroughly with a solution of the crystalised nitrate, of the strength of forty grs. to the ounce, and introduced it fairly into the larynx. This I repeated once or twice, on the spot, the child being forcibly held by the father. There was considerable irritation produced in the throat for a few moments, but I believe it was caused as much by the effort, on the part of the child, to resist, as by the action of the caustic.

I remained some time, after using this remedy, and in half an hour the improvement in his breathing was manifest to all present. I left him breathing decidedly better, and when I returned in the morning I found the child had passed a quiet and comfortable night, having slept a considerable portion of it. The caustic solution was again used by me, in the same way, at this visit, his breathing having again become somewhat more difficult, and with the same improvement in his condition. My visits to him were soon after discontinued, the little patient having entirely recovered.

Case 2d.—I was requested in May, by my friend, Dr. Dawes, to visit, in consultation with him, in the country, a little girl of two years of age, the daughter of R. S. Wood, Esq.

Dr. D. had been in attendance on the child for several days, and had administered the usual remedies in her disease, which was membranous croup. Having mentioned to him, some time before, the success of the argent-nitrat. solution, in the case which I have already stated, he was desirous of having it used in the present instance.

When I saw the child the breathing was extremely difficult, and the cough tight and ringing. The little patient was much exhausted, having slept but little during the twenty-four hours which had passed. It was constantly held by the mother in her lap, or by some of her friends, as the respiration became more labored when she was placed in the bed. I at once used the solution of crystalized nitrate of silver, introducing it into the larynx, and cauterizing also the back part of the throat, freely. The solution was of the strength of fifty grs. to the ounce.

The respiration became easier before I left the house. This was apparent to all, and at the same time the pulse improved, and the skin became more natural and warm. On our return, early in the morning, we found the little patient had passed a much more comfortable night, and her breathing had decidedly improved. The caustic was, however, again used, and with an equally satisfactory result. The symptoms of the disease gradually yielded, and the child recovered. As I was not aware, or had forgotten the treatment which had been pursued, in the commencement of her case, I applied to Mr. Wood, who had formerly pursued the study of medicine, for a statement of it. I received the following reply:

"My daughter, about two years old, was attacked with croup in the month of May last. She had never suffered previously from any disease, and her constitution was good. After trying the usual domestic remedies, such as hot baths, emetics, local applications, and small doses of calomel and ipecac. frequently repeated, we were induced to send for our family physician, Dr. Dawes, who prescribed mercury to the full extent warranted by her critical situation. On the third day, the doctor proposed consulting with you, in regard to the propriety of introducing a strong solution of the nitrate of silver into the larynx. I readily gave my consent, and the operation was performed twice within twelve hours. The character of the respiration was perceptibly changed on the first trial, but we felt doubly sure of success on its repetition; the pulse rallied, and the color of the skin became more natural.

"She is now enjoying perfect health."

Other cases have been treated by Dr. May with equal success, the history of which have been furnished by him; but, as our object has been to give the testimony of different members of the profession, from various localities, these may with propriety be omitted.

Dr. A. M. Vedder, Lecturer on Anatomy and Physiology, at Union College, has treated many cases of membranous croup by topical measures. The subjoined cases were communicated by Dr. V.

Even at the present day, there are medical men who will not admit that the passage of an armed probang into the larynx of the adult can be accomplished. Much more emphatically do these men deny the possibility of cauterizing the larynx of the young child. Within the last year, an astute professor in one of our medical colleges declared, before his class, his firm belief that the operation had not been, and never could be, performed! To such "blind guides," we would commend the interesting fact recorded in the second case reported by Dr. Vedder.

Case 1*st.*—A little girl, aged six years, was under treatment by a neighboring practitioner, who call me in consultation. She was first taken with what we supposed to be slight catarrhal symptoms; after a few days, the cough became stridulous, and was accompanied with some fever. These symptoms continued for three weeks, gradually increasing in severity. At this time I saw her, in the evening, and found her laboring under the characteristic symptoms of inflammatory croup; pulse rapid, and small; voice reduced to a whisper; respiration high and labored; tonsils red and inflamed, but not covered with false membrane. The attending physician had treated her with sinapisms, calomel, and tartar emetic, the later in emetic and nauseating doses.

I suggested the topical application of nitrate of silver, which was readily acceded to. Two applications were made (℈ ii. to ℥ j. aqua). The probang was found covered with a thick, tenacious secretion. Respiration became somewhat more free. On the following day, there was a marked increase of all the symptoms, the silver was again applied three or four times during the day, entering the glottis each time. There was now a gradual improvement of all the symptoms, and no further applications were made. During this time, calomel and James' powder were also administered.

Case 2d.—Louisa ——, aged six years, general health previously good, came home from school (Nov. 1st) complaining of sore throat and cough, which was followed by vomiting. A homœpathic doctor was sent for, who treated the case as "sore throat" for five days. During this time, she was not wholly confined to the bed, and was about the house a part of the time. On the afternoon of the fourth day, she became very hoarse, with loss of voice and decided croupy cough. Nov. 6th, confined to bed, with considerable heat of skin and thirst. I saw the patient this day, for the first time, at 6 o'clock, P. M. Expression of countenance anxious, skin pale, voice reduced to a whisper, respiration extremely difficult, high and characteristic, pulse frequent, skin above natural temperature, cough frequent; applied the nitrate of silver with the probang, which did not produce any unpleasant symptoms; her breathing became somewhat easier; during the night her respiration became more difficult, and an emetic was administered, which was followed by some relief. *Nov. 7th, A. M.* Countenance still anxious, color of skin inclining to blue, respiration not much improved, almost complete aphonia,—prescribed the following powder, to be taken every three hours.

℞ Tart. Antim., gr. ⅛,
Hyd. Chlor., M. gr. ¼,
m.

Applied the silver three times during the day. *Nov. 8th,* No improvement, sweats now freely, and has done so all night. On coughing, expectorates a little mucus, particularly after applying the sponge, continue powders and apply cold water to the neck by means of a towel. *Nov. 9th,* No improvement; applied the sponge, and on removing it *the false membrane* was found attached to the sponge; and on examination found it to be a membranous tube two and a-half inches in length, and about one half the thickness of milliner's pasteboard. Her respiration became immediately easier and she continued to improve from this time; the sponge was not again applied, her cough remained "croupy" for several days longer, her voice did not become natural for more than a week after, the cold water and expectorants were continued for several days. Her health has been good since: her voice becomes hoarse, occasionally, on taking cold. I should have remarked, that at my first visit I saw patches of lymph on the tonsillory glands. On taking charge of the patient (which I did with great reluctance), I had very little hope of a favorable termination, on account of the advanced stage of the disease, and must attribute the cure to the application of the silver.

Since treating this case I have used the silver with varying success. In two cases, in which I was called early, and in which the lymph could be seen in the upper part of the fauces, the patients recovered. In one case where I was called in consultation, the patient was in *articulo mortis*. We used the silver without any relief. In two other cases, I was called late in the disease; the nitrate of silver, and other remedies were employed; but both cases terminated fatally.

Believing, as we conscientiously do, that the reducing, perturbating plan of treating young children for croup, is, in a large proportion of cases, not only useless, but worse than useless; and that, on the other hand, we have, in the topical treatment, when judiciously combined with mild general measures, an entirely practicable, and, in most cases, an effectual means of arresting the disease, we are solicitous to remove the objections, which, for various reasons, exist in the minds of many practitioners, and hinder their adoption of this method. We have alluded to the dogmatic scepticism of one class, but fortunately this class of "unbelievers in the earth's rotation" is very small. Still, there is a much larger class, who, whilst they admit both the practicability and utility of the treatment, reject its employment because of the supposed difficulty of medicating the larynx in disease. This difficulty, we can assure the profession, does not exist. It is neither really difficult to accomplish, nor is it in any degree a hazardous operation. Any medical man who understands the relative anatomy of the parts, can, with very little practice, readily pass the sponge probang into the larynx; and, as benefit comes from the attempt (for the parts cauterized thereby are those first affected in croup), no time should be lost in putting the method into practice, in the onset of the disease.

During the prevalence of the disorder, last winter, when the writer was receiving calls, daily, to visit cases of croup, a request came from a physician residing in Morrisania, to meet him in consultation in a case of membranous croup. As the writer could not comply with the request, his assistant, Dr. Richards, attended the consultation; and he testifies to the fact, that the case was one exhibiting all the characteristic signs of true croup, of a very severe grade. The physician, Dr. Mann, who is an accomplished and

and experienced practitioner, had had many opportunities of treating croup by the ordinary method; but in this case, which we shall give, he employed, for the first time, we believe, cauterization of the larynx; and it will be seen that in his hands the operation was both practicable and successful. So much pleased was Dr. M. with its effects that he has since placed his entire dependance, as it will be seen, on topical medication alone in the treatment of the disease.

The following communication has just been received from Dr. Mann:

Morrisania, May 12th, 1854.

Doct. Horace Green,

Dear Sir:—The enclosed list of cases of Cynanche Trachealis, I send agreeably to your request. In none of them were any internal remedies used, not even a preparatory emetic, except, where circumstances required it, a mild cathartic. With this exception, they were all treated by topical applications exclusively.

Case 1st.—On the 7th of Februrary last I was sent for, at 4 o'clock, A. M., to attend Alfred ———, aged four years. Circumstances prevented my seeing him until 8, A. M. I then found him laboring under true membranous croup. The attack commenced on the evening of the 6th, preceded by hoarseness and slight cough. I had previously attended the patient on January 8th, for pneumonia of the left lung, from which he had recovered perfectly, though still somewhat weakened by this illness. I found the little fellow struggling for breath, each effort at inspiration accompanied by a loud crowing sound, the muscles of the mouth contracting violently at the same time, the countenance and lips livid, a cold perspiration standing in large drops upon the face, and every sympton indicating rapidly approaching dissolution. I immediately passed through the larynx and nearly down to the bifurcation of the trachea, a sponge-armed probang, containing one dram of a sol. argent. nit. xl. grs. to ℥ j. The first effect of this application was a severe fit of coughing and choking, followed by copious vomiting, which relieved the respiration temporarily. Between this time, viz., 8 A. M. and 7 P. M., five applications were made; at about the latter hour Dr. Richards saw the patient with me. We found him sitting up, perfectly conscious and able to speak, and had taken some beef tea. Respiration entirely free from any crowing sound, which could now only be heard during a fit of coughing. Skin moist. *Feb. 8th.* Continues still improving; respiration natural; slept at intervals during the night; appetite craving; cough troublesome; slight fever; face flushed. *Feb. 9th.* No symptoms of croup remain; slight bronchitis, which yielded in a few days to mild remedies.

Case 2d.—On Februrary 11th I was called to see Sarah ——, aged two years. The patient had been suffering for two days previously, with hoarseness, and what the mother called a "sore throat," accompanied by a loud ringing cough. On examination of the larynx and fauces, I found them considerably inflamed. The tonsils were enlarged; and adhering to the posterior surface of these glands, I discovered a white substance lining them, and extending downward toward the larynx. The symptoms of true membranous croup were strongly marked. Skin hot and dry; face flushed; countenance expressive of anxiety and suffering; cough and respiration characteristic. I immediately made an application by means of the sponge-probang to the fauces and larynx, of a sol. argent. nit. grs. lx. to ℥ j., then passed through the rima glottidis.

Feb. 12th. Patient playing about the room; respiration natural; cough troublesome, and accompanied by a free secretion of thick, ropy mucus, which the patient on raising immediately swallows. Detached the white substance from one tonsil, and found it to be a firm membranous exudation. This child had one other application of a weak solution, and was perfectly recovered on the third day after the first visit.

Case 3d, Feb. 25th, John ——. This patient was seized with slight hoarseness toward evening, on the 24th, but awoke at about 4 o'clock, A. M., with unmistakable symptoms of croup, which were rapidly increasing in urgency and danger. Ipecac. onion draughts and mustard, with other domestic remedies having failed to produce relief, I was summoned to the sufferer. Applied a sixty grain sol. at once, 7 A. M. At 4 P. M. found the respiration much relieved, the patient being better in every respect. Applied a thirty grain sol.

Feb. 26th. The little fellow saw me tying my horse, and fearing, as he expressed it, that I was going to "run the poker down his throat again," scampered off and hid.

The above cases it gives me pleasure to submit to your perusal. I should have regarded any one of them as nearly hopeless under the old plan of treatment.

Very respectfully yours,
F. P. MANN.

Doct. Horace Green, 12 *Clinton Place.*

With the history of one more case, voluntarily furnished by Dr. M., an intelligent physician of a neigboring State, we shall close our selections from the mass of testimony that has been received, in favor of the plan of treatment advocated in these pages.

Dear Sir:

You will excuse the liberty which I assume in addressing you. I cannot forego the opportunity I have in expressing to you the gratitude I now feel for your kindness to me, and for the information I acquired in the short time I passed in your office, during my late visit to your city. So elated do I feel with the result of your mode of treating diseases of the air passages, that I must trouble you to read an account of my first experience in the use of topical applications, in an interesting case of croup.

Feb. 18th, at 8 P. M., a gentleman entered my office, in some haste, and requested me to step across the street and see his child, which he feared was dying. Without ceremony or question, I accompanied him home, where I found two physicians, with some dozen more or less, neighbors, surrounding the bed of a little fellow, six years of age. The sound of his inspiration and expiration was to me a sure index of the nature of his disease. In the diagnosis we could not be mistaken. He was in the very last stage of membranous croup. The patient was of a bilious temperament, black hair and eyes, dark complexion, very large head, with a short and very thick neck; broad chest, and for a boy of his age very muscular. It was with the utmost difficulty that he could breathe, every muscle of his body seemed brought into action at each respiration; the countenance was flushed and anxious, the lips pale and swollen, the eyes protruded, nostrils dilated, and ever and anon that cough, the sound of which you know, but which I cannot describe; pulse beyond enumeration. All these were sufficient to cause the friends and physicians, as well as myself, to believe the child to be in *articulo mortis*. I, however, proposed cauterization with the probang; the physicians, after explaining to them what I *meant*, opposed it, on the ground that it was not only perfectly useless, but it was utterly impossible to pass it into the larynx; the which, I of course flatly denied. I then, without much regard to professional etiquette, as the case demanded action rather than ceremony, and also because I was determined, if posssible, to try your plan, explained to the friends, as well as I could, the nature of what I proposed to do, the objects in view, and the probable results that might reasonably be anticipated; nor did I keep back the fact that the child, notwithstanding, might die.

The friends immediately consented to my doing what I pleased, as the child would die without immediate relief. All the usual remedies, such as emetics, leeches, blisters, &c., had been used. I immediately made a sol. of argent.-nitrat. cryst. fifty grs. to the ounce of aqua. distil., saturated the sponge, and made the attempt to pass it into the larynx; the child struggled and I did not succeed, but, what was very good, I did succeed in sponging the fauces and epiglottis. My failure, however, to pass into the larynx, was a sort of triumph to the non-believers. However, the child strangled, coughed and discharged considerable ropy mucus. After a delay of some fifteen or twenty minutes, I secured the head of the child, and made the attempt again; and what is *better*, I *succeeded well*. The little fellow strangled, coughed, and discharged a large quantity of thick ropy mucus, with patches or shreds of membrane, and in one minute was sensibly relieved. In ten minutes the wheezing sound in expiration was gone. Then was my hour of triumph, and I made use of it. After waiting a half hour, I prescribed hyd. sub. mur., gr. i.; ipecac., gr. i.; opii., gr. $\frac{1}{8}$, every hour, and left for home.

It will be unnecessary to follow out the farther history of the treatment in this case, as detailed by Dr. M——. Topical, with the required general treatment, was continued for several days, and the patient recovered perfectly.

The history of these last cases has been given, not only as corroborative of the efficacy of the treatment, but to show, what has proved true in many other instances, that where intelligent medical men have made the attempt, earnestly, to medicate the larynx, their efforts have, in all cases, been successful.

It was our intention at the close of this paper to have submitted a detailed statement of the plan, both local and general, that we would advise to be pursued in the treatment of membranous croup. But the pages allotted us in the *Monthly*, have been already fully occupied. Besides, these views have been stated at length, in our work—"Observations on the Pathology of Croup, and its treatment"—which has been several years before the medical public.* The accumulated experience furnished from the treatment of a large number of cases of croup, since the publication of that work, on the

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*With regard to the general treatment in the management of croup, we accord fully with Dr. Ware, in the propriety of avoiding, generally, "all reducing, depleting and disturbing remedies." We would administer, as required, mild emetics of ipecacuanha, or ipecac. and sulphate of zinc. Calomel alone, or in combination with Dover's powder, or opium is frequently required, but never in *scruple doses*, as it has been recommended to be given to young children, by some practitioners in this city. These remedies, together with the inhalations of the vapor of warm water, may be employed in the treatment of croup. But our main dependence in all stages of the disease should be on *cauterizations.* "This measure," says Prof. Wood, in his work on the "Practice of Medicine," "after an unsuccessful employment of other means, the practitioner would certainly be justified in resorting to." We would advocate its employment in the very access of the disease, as soon as the nature of the malady is ascertained. We have seen the disease repeatedly arrested in its formative stage, by a few prompt applications of the nitrate of silver to the fauces, and about the opening of the glottis.

After the inflammation has advanced, and the surfaces of the larynx have become involved in the disease, the argentine solution should not only be applied to the tonsils, and to the faucial region generally, but the applications must be extended into the laryngeal cavity.

If the exudations are not already formed into adventitious membrane, the employment of a few successive applications below the epiglottis may be sufficient to arrest the plastic inflamation altogether. But even in a more advanced state of the disease, when from its continuance and the severity of the disease, we have reason to apprehend the formation of a false membrane, or a "tubular mould" throughout the larynx and trachea, we should not despair of removing the obstruction, or arresting the inflammation.

When called, therefore, to a case of croup in this, its second or developed stage of the disease—and unfortunately, it is not until this period of the affection that medical aid is resorted to, in a large proportion of the cases of croup—the local employment of the plan therein advocated, *without the loss of a single patient, in our own practice*, has confirmed us in the opinion of its efficacy over all other methods hitherto advanced for this terrible malady; and it has impressed us with the full belief, that had the prejudice against topical medication not existed with the profession in this city—a prejudice which, we regret to add, has been excited and fostered by some of our prominent medical men—and this method conjoined with *mild* constitutional remedies, had been generally adopted, in the treatment of those *six hundred and eighty* fatal cases of croup, which occurred during the last year, not one half of that number would have perished, at least from that disease of which they died.—*American Medical Monthly.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, JULY, 1854.

NEW HAMPSHIRE MEDICAL SOCIETY.

The Sixty-fourth Anniversary of the "N. H. Medical Society" was held at the Court House, in Concord, on Tuesday and Wednesday, June 6th and 7th, and was fully attended.

The following persons were elected Fellows, took their seats and participated in the doings of the meeting.

Frank B. Ayer, M. D., Meredith Bridge.
M. R. Warren, M. D., Wolfborough Bridge.
James R. Smiley, M. D., Grafton.
Nathan Call, M. D., Boscawen.
Adam Moore, M. D., Littleton.
Ira S. Chase, M. D., Bristol.
Wm. Walker, M. D., North Barnstead.
James Danforth, M. D., New Boston.
Gurley A. Phelps, M. D., Temple.
Valentine Manahan, M. D., Springfield.
George Sanborn, M. D., Sandwich Centre.
Wm. Laighton, M. D., Portsmouth.
Wm. A. Smith, M. D., Thornton.

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nitrate of silver, conjoined with other appropriate measures, should be entered upon at once.

An application may first be made to the tonsils, and about the opening of the glottis. After a delay of from fifteen minutes to an hour, the operation may be repeated, and the sponge wet with the solution should then be passed into the larynx. The cauterizations may be repeated once in two, four, or six hours, according to the effect produced and the intensity of the disease.

The Society being informed that Dr. R. D. Mussey of Cincinnati, formerly of this State, and a former President of this Society was in town, Drs. Martin, McFarland and Twitchell, were appointed a committee to wait on him and invite his attendance at this meeting. Dr. Mussey appeared, was cordially received, and at the desire of the members, favored the Society with some interesting reminiscences of former days, and his recollections of those members who were his associates in the Society in years long past.

On motion of Dr. Brown, seconded by Dr. Twitchell,

Resolved, That the Society will publish the Transactions of its Annual Meeting, for the use of its members, and for gratuitous distribution.

On motion of Dr. Gage, seconded by Dr. Stackpole,

Resolved, That the Secretary request the Committee of Publication of the American Medical Association, to deposit with the Secretary of this Society copies of the Transactions of the Association for sale.

On motion of Dr. Twitchell, seconded by Dr. Gage,

Resolved, That the office of "Committees to examine Patients" be abolished.

On motion of Dr. Twitchell, seconded by Dr. Gage,

Resolved, That Drs. Webster, Hubbard and Gage, be a Committee to prepare and publish the Transactions of each Annual Meeting of the "N. H. Medical Society."

The following were elected officers for the ensuing year:

President,—John S. Fernald, M. D., Barrington.
Vice President,—Adoniram Smalley, M. D., Lyme.
Secretary,—E. K. Webster, M. D., Boscawen.
Treasurer,—Silas Cummings, M. D., Fitzwilliam.

Councillors.

Charles P. Gage,
P. A. Stackpole,
Alonzo F. Carr,
J. C. Eastman,
Geo. B. Twitchell,
John Clough,
Wm. H. H. Mason,
William P. Stone,
Levi G. Hill.
Thos. H. Marshall,
E. L. Griffin,
J. O. French,
J. R. Smiley,
J. F. Hall.

Censors.

Geo. W. Garland,
Chas. F. Elliott,
Edward Spaulding,
J. H. Crombie,
Frederick Boyden,
Luther C. Bean,
Moses R. Warren,
B. H. Phillips,
J. H. Smith,
James Danforth,
J. P. Whittemore,
J. Batcheller,
Adam Moore,
J. F. Hall.

Corresponding Secretaries.

L. M. Knight,
E. L. Griffin,
J. F. Hall.
C. H. Shackford,
Geo. B. Twitchell,
Harrison Eaton,
John Clough.

Delegates to Dartmouth College.

Wm. W. Brown,
J. F. Sargent.

Delegates to the American Medical Association.

P. A. Stackpole,
Geo. B. Twitchell,
Silas Cummings,
Levi G. Hill,
Charles P. Gage,
T. H. Marshall,
E. L. Griffin,
John Clough,
B. H. Phillips,
James Batcheller,
Edward Spaulding,
F. P. Fitch,
W. W. Brown,
B. W. Sargent.
J. C. Hanson.

Orators.

A. H. Robinson,
Wm. P. Stone.

Substitutes.

J. O. French,
E. L. Griffin.

At 12 o'clock, the President, Prof. Albert Smith, M. D., favored the Society with an Address on "Conservatism in Medicine."

Appropriate remarks by Dr. Mussey and Gov. Martin occupied the remainder of the forenoon session.

In the afternoon the Society were amused and interested by some spicy remarks by Rev. Mr. Trask, on tobacco. He was followed by Dr. Mussey, who has been an *anti-tobacconist* for very many years, and favored the Society with many cases illustrating its injurious effects.

The dissertation by Dr. McFarland, on the "Poetry of Medicine," was a learned and polished production.

An interesting communication from Dr. Smalley on the Sanitary Condition of Grafton and Coos Counties, was read; this was all the report which appeared from the "Corresponding Secretaries."

On Wednesday June 7, at 9 o'clock, A. M., Dr. W. H. H. Mason read a dissertation on "the necessity of a knowledge of the chemical changes that take place in the human body while in a state of disease." It gave evidence of hard study and clear-headed reflection.

The report of Dr. J. E. Tyler, one of the delegates to attend the examinations at Dartmouth College, was read.

Dr. McFarland from the Committee on "Prosecutions for Malpractice," made a report; presenting an opinion of Hon. Joel Parker, and some foreign correspondance.

Drs. Albert Smith, Wm. H. H. Mason and Ezra Carter were appointed a Committee on Scarlatina.

Drs. Dixi Crosby, John Clough and Geo. B. Twitchell were appointed a Committee on Hernia.

A communication was received from "The Manchester Pathological Association" upon "the use of water drawn through lead pipes," containing the report of a committee of said Association recommending to petition the Legislature that it may be made a penal offence to put lead pipes into wells or aqueducts for the conveyance of water to be used in families. Referred to a Committee consisting of Drs. Josiah Crosby, F. P. Fitch and L. M. Knight.

Various other matters were presented to the consideration of the Society, and received proper attention.

This meeting of the Society may be looked upon as opening a new era in its history; the admissions were more numerous than ever before, and we venture to predict that all will be proud of its Transactions when they make their appearance. May it go on to greater prosperity and usefulness, and each succeeding year render it more and more an object of pride to the Profession in New Hampshire, and to New Hampshire men wherever found.

THE CENTRE DISTRICT MEDICAL SOCIETY held its Annual Meeting at the Phœnix Hotel, in Concord, on Wednesday, the 3d day of May last.

The following officers were chosen for the ensuing year:

Dr. James G. Sargent, *President.*
" Geo. W. Garland, *Vice President.*
" Wm. P. Stone, *Secretary.*
" Eph. F. Wilson, *Treasurer.*
" Charles P. Gage, *Librarian.*

Councillors.

Dr. Geo. H. Hubbard,
" E. K. Webster,
" James B. Abbott.

Library Committee.

Dr. Ezra Carter,
" Thos. Chadbourne.

Dissertations were read by Drs. Shannon and Currie, and after a pleasant and profitable session the Society adjourned to meet at the same place on the first Wednesday of October next.

PHYSIOLOGY OF THE FŒTAL CIRCULATION. Prof. E. R. Peaslee, of Hanover, has published an Essay in which he attacks some of the statements ordinarily received as facts in relation to the Fœtal Circulation with the boldness which is inseparable from a consciousness of being in the right; and as Prof. P. was never known to advance a crude speculation or make a proposition he was not well prepared to prove, we bespeak for his *new views* of Fœtal Physiology the attentive consideration of the Profession. We hope to present it to our readers entire in our next number.

CLINICAL LECTURES ON PULMONARY CONSUMPTION. By Theophilus Thompson, M. D., F. R. S., &c. Philadelphia: Lindsay & Blakiston, pp. 239.

This Dr. Thompson is the accomplished physician to the Brompton Hospital for Consumption, where are annually treated a very large number of people afflicted with diseases of the Chest, consequently he has had unequalled opportunities to make investigations in this disease, free from the liability to which the private practitioner is subject, of viewing his cases with his judgment somewhat influenced by the result of the few cases which he may have previously treated.

The clear and distinct diagnosis, sound and logical pathological deductions and plain common sense view of the treatment render this book of great value to all who are liable to be called to treat Consumption; and as this is the disease which in its fatality outnumbers any other, every practitioner who wishes to do his whole duty to himself and his patients, should buy and read this book.

The lecture on Cod Liver Oil is of especial value at this time. We append the two first clauses.

"The great object, gentlemen, of all our researches is to attain to the successful treatment of disease. With this conviction, I propose to devote the present lecture to the consideration of the effects of a remedy which you will have observed is very largely employed at this Hospital, even to the extent of 600 gallons annually.

The records of the Hospital give you an opportunity of comparing the effect of treatment conducted on general principles, irrespective of the use of this remedy, with treatment in which its administration has occupied an important place; and the more carefully you institute the comparison, the more you will be convinced of the value of this medicine in the treatment of phthisis, when appropriately administered, and combined with the use of such other measures as any special circumstances in the individual patients may require."

Medical Lectures will commence on the 3d day of August next, at the Medical Institutions at Hanover, and Pittsfield, Mass.

The Faculty of the New-Hampshire School remains unchanged, and is well worthy the confidence of the Profession.

Some changes have occurred in the corps of teachers at the Berkshire School, but from what we know of the new incumbents, we regard it as still a strong Faculty.

We would not if we could make invidious comparisons between these institutions, for while we feel all confidence in the board of instructors of the institution of our own State, and a strong desire that it may prosper as it deserves, we have none but good wishes for our old friends of the Massachusetts School, and wish them also abundant success, and full classes of such men as will be an honor to their Alma Mater and our Profession.

Vermont Medical College. We learn that important changes are to be made in the Faculty of this Institution.

Profs. Palmer, Clark, Bartlett and Childs have taken up their connexion and their places are to be filled by new men. The instruction in this School has always been of a high order, and fully up to the times. We hope the Trustees may be successful in filling the vacant chairs with men competent to sustain the character of the School.

We have heard it threatened that the new School at Burlington is to "kill off" this at Woodstock, but as means adequate to the end to be accomplished are necessary, we have no great fears for our Alma Mater till some greater Richmond takes the field.

CONDENSED SUMMARY.

Silk instead of Sponge for Laryngeal Probangs. It has been recently suggested that a ball of silk floss, or ravellings, securely attached by sewing through and through loosely, is much superior to the sponge for making topical applications to the vocal organs. It imbibes a sufficient quantity of the solution, and produces less irritation in passing through the "rima glottidis," less involuntary contraction, and can, therefore, in most instances, be passed beyond the epiglottis at the first or second application.—*Western Lancet.*

Sponge Pessaries. Dr. A. P. **Merril**, in the Memphis Medical Record, speaks very highly of the use of the sponge pessaries. He does not limit their employment simply to cases of prolapsus-uteri, believing that engorgement of the cervix, together with consequent ulceration, is often the effect of prolapsus. He is certain that he has seen both these attendant conditions relieved by a simple though permanent separation of the organ. He thinks that permanent cures are rarely effected by the application of caustic and astringent agents.

After preparing the sponge properly, a piece of twine is passed through its smaller end, in order more easily to effect its withdrawal; it is then smeared with mucilage to facilitate its introduction. The patient himself will soon learn how to use it.

Galvanism as a substitute for Ergot. Dr. BARNES, in an interesting paper read before the Medical Society of London, advocated strongly the use of galvanism in cases where ergot is usually resorted to. The discussion that followed, leaned strongly to the idea that the use of ergot as an ecbolic, should be restricted within narrower limits than at present. Ruptures of uterus and vagina, with sloughing of the latter, and the death of the fœtus, were cited as the effects of the use of ergot. Some of the members preferred the forceps in inertia of the uterus. In a case where the pelvis was very small, the child was turned, and decapitated after the delivery of the body; and the head remaining in the uterus, was driven through its parieties by the *ergotized* contraction of the latter. The ergot was of course administered before the extraction of the body, by an inexperienced student of medicine. We should be glad to hear from some of our correspondents on this subject. Galvanism, though said by Simpson and others to be uncertain in its effects on the uterus, is an agent more under the control of the practitioner—*Philadelphia Medical Journal.*

Rheumatism. M. TROSSEAU cures acute articular rheumatism with veratim. One pill containing the tenth part of a grain of veratim is given the first day, two the second, three the third, increasing a pill a day, until a decided effect is produced.

Aneurism. Coagulation of the blood is produced instantly, by injecting into the artery a few drops of concentrated perchloride of iron. A very fine trocar is used, made of gold or platinum, which is gradually insinuated through the parieties of the artery, obliquely. A small syringe, worked by a rask and pinion, is fitted to this trochar, and the fluid is forced into the vessel slowly, drop by drop. Every turn of the pinion forces in just two drops of the liquid. The circulation is arrested during the operation by pressure above and below. A few drops are sufficient to produce a firm and solid coagulation. The experiments hitherto have been mostly made on animals. Three or four drops have sufficed in a sheep, six or eight in a horse. But one operation for aneurism is reported, in the suborbital artery, which was entirely successful.—*Memphis Medical Recorder.*

Fissures of Anus. Dr. Giuseppe Peirano has used an application composed of three grains of extract of belladonna and four grains of unguentum rosæ, with great advantage in fissures of the anus, an affection which is often obstinate and very painful. In numerous cases this remedy has not only relieved the pain but induced a cure when various applications had been used in vain.—*Revue Medicale.* (*From Gaz. Med. Lombarda.*)

Chloroform. Dr. Hardy (Dublin Journal, Nov.) relates cases to show the efficacy of chloroform vapor directed upon the part in uterine affections. The vapor is applied by means of an instrument consisting of a metallic chamber, to one end of which a pipe with a valve is attached to the gum-elastic bottle. A sponge dipped in chloroform is placed in the metallic chamber, and then, by pressing on the elastic bag, the vapor is expelled through the pipe. In cases of carcinoma and simple ulceration of the os uteri, this plan appears to be very efficacious; but it is useful also in pruritus pudendi, sore nipples, and in other painful affections of the skin.

M. Nelaton (Gaz. des Hop. and Med. Times and Gaz., March 4) relates a case in which the vapor of chloroform directed (by Hardy's apparatus) upon an abscess in the axilla, produced complete insensibility, so that the entrance of the knife was unperceived.

Diabetes Mellitus. Dr. Basham (Lancet, Jan.) relates two cases treated by the permanganate of potash, in doses of ten grains three times daily; the amount of urine was very slightly diminished; the sugar was augmented; the other symptoms were unaffected. Dr. Basham has employed alkaline treatment with advantage; the sulphate of soda was found to be useless. In one case opium was carefully administered, to the amount of three grains daily, but no striking effect was produced.

Gout. Dr. Goolden (Med. Times & Gaz., Nov.) uses with good effect, as a local application, spirits of wine. The relief to the pain is said to be sometimes very great. In the same journal the utility of an old remedy, the carbonate of soda, as a local application in gout and rheumatism, is referred to. A drachm of the carbonate is mixed with a hot bread poultice, and applied over the joint.

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THE

NEW-HAMPSHIRE

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A MONOGRAPH ON THE FŒTAL CIRCULATION.

BY E. R. PEASLEE, A, M., M. D., *Prof. of Anatomy in Dartmouth College and in the New-York Medical College, and of Surgery in the Medical School of Maine.*

[From the American Medical Monthly, May, 1854.]

FŒTAL Anatomy has, for several years past, received a large share of attention, while fœtal physiology has hitherto been, to a great extent, neglected, except so far as mere development is concerned. It is, indeed, a department of no ordinary difficulty, since the human fœtus passes through various successive phases of function, as well as development. In regard to its circulation, for example, it is at one time analogous to a fish; subsequently to a reptile; and does not become a true mammal, indeed, till after birth.

Still, we may now enter this field with views somewhat extended; and it is the object of this paper to show that the view of the fœtal circulation, which is adopted by the highest authorities, is unsatisfactory and incorrect; and to propose such a view as the present state of science demands.

In this view the last half of fœtal life alone is included; and it is proper to commence with a statement of the ideas, both in regard to the course and to the physiology of the fœtal circulation, which are generally entertained.

I. *The course of the Fœtal Circulation.*

About 150 years ago a violent controversy arose in France, and extended to the neighboring kingdoms, respecting the manner in which the blood passes between the auricles, through the foramen ovale.* It was excited by Meri's theory—that it passes from the left to the right auricle—while Harvey had assigned to the current an opposite direction. Boerhaave, Lancisi, Winslow and others, investigated the subject; and their conclusions have undergone but slight modifications up to the present time.

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* For the arguments adduced in this controversy, see Senac's Traité de la Structure du Cœur, tome 1, p. 369; and the Supplement, in tome 2.

The course of the fœtal circulation as usually stated—independently of the inferences generally associated with the facts—is as follows:

1. The aerated, or arterial blood returned by the umbilical vein, from the placenta through the umbilicus, and to the inferior surface of the liver, is thence poured into the inferior vena cava; a part having entered that vessel at once through the ductus venosus,* and the rest having first been transmitted through the liver.

2. The blood in the inferior vena cava is poured into the right auricle, and by the *Eustachian valve turned across into the left auricle through the foramen ovale.*

3. While the left ventricle is thus filled, the right is *filled by venous blood*, from the superior vena cava.

4. The mostly *arterial* blood is sent from the left auricle through the left ventricle into the aorta, and *principally through the branches from its arch* to the head and upper extremities; the *venous* blood in the right auricle is sent through the right ventricle into the trunk of the pulmonary artery; thence in very *slight degree* to the collapsed lungs, but *almost entirely* through the ductus arteriosus into the descending aorta—there to mingle with the *purer* blood which has passed down through the arch of the aorta. 5. This mixed blood is distributed to all the parts supplied in the adult by the descending aorta; and the blood thus carried to all parts below the diaphragm is returned to the right auricle by the inferior vena cava. 6. But the internal iliac arteries are not only distributed in the fœtus as in the adult. They are also prolonged on each side of the bladder, and above it to the umbilicus, and through the latter into the cord, and to the placenta. These prolongations are called the "umbilical arteries;" and by them the blood is returned from the fœtus to the placenta.

This view is illustrated by Fig. 1, here taken from Carpenter's Physiology; and which is placed on another page for the sake of contrasting it with the correct representation of the parts in Fig. 2. Some of the words in the preceding paragraph are also italicized, since they convey incorrect or false ideas, and will be particularly remarked upon in another connection.

II. *The Physiology of the Fœtal Circulation, as at present understood.*

1. The blood arriving in the inferior cava from the umbilical artery, "having been thus transmitted through the *two* great depurating organs—the placenta and the *fœtal liver*—is in the condition of arterial blood; but being mixed in the vessels (the inferior cava) with that which has been returned from the trunk and lower extremities, it loses this character *in some degree*, by the time that it arrives at the heart."—Carpenter's Human Physiol., 4 Ed., p. 997.

2. This mixed blood is prevented, "in *great degree*, if *not entirely*," from farther admixture with the venous blood in the right auricle, by the *peculiar action* of the Eustachian valve; which carries it at once through the foramen ovale into the left auricle.—Ditto.

3. The ventricles contracting, the left propels its "*arterial*" blood into the ascending aorta, and supplies the head and upper extremities *before undergoing any admixture;* while the right ventricle sends its *venous* blood through the (trunk of the) pulmonary artery, and the *ductus arteriosus, into the descending aorta*, there to mingle with the pure blood just mentioned, and be distributed to the trunk and lower extremities.—Ditto.

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* This vessel extends from the umbilical vein directly into the vena cava.

4. "Thus the head and superior extremities, whose development is required to be in advance of that of the lower, are supplied with blood *nearly as pure* as that from the placenta;" and *vice versa* as to the rest of the body.—Ditto, and Wilson's Human Anatomy, p. 555.

5. "In the adult the blood would be circulated through the lungs and oxydated; but in the fœtus the lungs are solid and *almost impervious.* Only a small quantity of the blood passes, therefore, into the lungs; the *greater part* rushing through the ductus arteriosus," &c.—Wilson, ut sup., p. 553.

6. "The pure blood from the placenta is distributed in considerable quantity to the liver, before entering the general circulation. *Hence,* the abundant nutrition of that organ, and its enormous size in comparison with other viscera," in the fœtus.—Ditto.

We find essentially the same statements in all the best authors of the present time; and, therefore, no farther quotations or authorities are deemed necessary. We have here, also, italicized such expressions as need particular consideration, on account of their entire or partial incorrectness.

Each of the preceding six propositions will be separately reviewed, with the intention of showing their incorrectness, and at the same time of demonstrating the only true view of the subject. A few remarks will, however, be premised in this connection, expressive of the author's doubts as to the peculiar, and really incredible action universally assigned to the Eustachian valve.

The assumed function of the Eustachian valve not probable.

Some experiments, intended to elucidate this subject, and to which a great deal of importance seems to have been attached, were performed by the late Dr. John Reid.* The following was regarded as the most satisfactory: Having injected both the vena cava, of a fœtus of seven months, at the same time—the superior cava with yellow, and the inferior with red injection—he found that the "red had passed through the foramen ovale, and filled the left side of the heart without any intermixture with the yellow, except very slightly at the posterior part of the right auricle. Not a drop of the yellow appeared to have accompanied the red into the left side of the heart. From the left side of it (the red) ascended the aorta and filled all the large vessels going to the head and upper extremities. The injection in all these vessels had not the slightest tinge of yellow."

The *yellow* "filled the right auricle, free from admixture, except slightly at the posterior part of the auricle, as already mentioned. From the right auricle it filled the right ventricle, passed along the pulmonary artery, and filled the *ductus arteriosus* and branches, going to the lungs. On entering the aorta it passed down that vessel, filling it completely, without any admixture of red; and thus, all the branches of the thoracic and abdominal aorta were filled with yellow. The whole of the red had passed to the upper part of the body," &c.

Dr. Reid's experiments have, however, entirely failed to convince us that the Eustachian valve does, or can turn the current of blood from the inferior vena cava, across the right auricle, and through the foramen ovale, into the left auricle, without admixture with the venous blood from the inferior cava.

It is to be remarked, in the first place, that the complete isolation of the red and the yellow injections occurred only once in three similar experiments, and then in a fœtus of seven months, the others being of four months and at full term. Dr. Reid accounts for failure in the last case, since "the

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* Edinburg Medical and Surgical Journal; Vol. 43, p. 11, &c.

Eustachian valve is supposed to be less perfect at the full time than at an earlier period." What Dr. R. supposed, is really the fact, but would it be so, *if* the valve perform the part assigned to it? On the contrary, we should suppose the necessity for the separation of the venous from the arterial blood would increase (if such necessity at any time exists) as the fœtus becomes farther developed; and, therefore, that the valve would be most perfect just at the very end of the ultra-uterine life. It will, however, be shown that no such necessity actually exists at any time during the fœtal existence.

Again, we cannot suppose two currents of injection, forced through the vena cava of a dead fœtus, would comport themselves precisely as would the two currents of blood during life, even were the heart a passive organ. But when we consider its cavities, as exerting both a forcing and a suction power, the difference is vastly increased. In this view, the experiment appears utterly valueless, therefore. But if we are still inclined to regard the result as reliable, then it proves altogether too much—such a perfect non-admixture of the two currents during life being altogether inconceivable.

A distinguished anatomist remarks, in regard to the assumed crossing of the two blood-currents in the right auricle, without intermixture: "how this crossing is affected, the theorist will wonder; not so the practical anatomist."* He then speaks of the direction of entrance of the two vena cava, of the opening of the inferior almost directly into the left auricle; and of the use of the Eustachian valve—as enabling the anatomist at once to perceive the correctness of this theory. We confess that in our own case, the theory is more satisfactory without the anatomy than with it. Or, perhaps, we should rather say, that if our mere anatomy admits the belief in such a non-admixture in a dead fœtus, our physiology will not for a moment, in a living one. And if there *is* an admixture, the assumed function of the Eustachian valve must be relinquished and another be assigned to it, if possible.

On merely *anatomical* grounds, the anterior termination in the auricle of the superior cava may be regarded as necessitated by the relations of its primitive branches, and, therefore, of its trunk; the former being in front of the arteries arising from the arch of the aorta, while the termination farther back in the auricle of the inferior vena cava is demanded, by the liver being in front of it. Thus, also, its termination in the right auricle, so near the foramen ovale, may be necessitated by its relations to the aorta, and to the middle line of the trunk before perforating the auricle; and, therefore, the Eustachian valve may be considered as having a more important relation to the opening of this same vein, and the passage of blood through it, than to the circulation through the foramen ovale—though it may incidentally exert some influence on the latter.

These suggestions, be it observed, are made on merely anatomical grounds. They are made to meet the inferences just objected to, and to show that the latter alone cannot form a reliable basis for the physiology of the fœtal circulation. Other facts, however, will be adduced in favor of the inferences just made; and the anatomy itself will receive some important corrections as we proceed. Meantime, we will regard the assumed function of the Eustachian valve as not proved, and as improbable.

Objections to the physiological views generally entertained.

1. No importance is attached to the fact that most of the blood from the placenta circulates directly through the liver; except so far as its influence

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* Wilson's Anatomy, p. 554.

upon the development of the liver itself is concerned, and so far as the liver is a depurating organ. Indeed, it is incorrectly assumed, that the major part of the blood passes through the ductus venosus into the vena cava inferior.

2. The fact that venous blood is returned from the lungs through the pulmonary veins to the left auricle, is entirely overlooked; it being assumed, also, that almost no blood enters the lungs at all,—since,

3. It is incorrectly stated that almost all the blood in the trunk of the pulmonary artery passes into the descending aorta through the ductus arteriosus.

4. No stress is put upon the dilatation or the contraction of the auricles, as having any influence in mixing the blood contained in the two auricles, through the foramen ovale.

5. It is assumed that the greater development of the head and upper extremities at birth, is owing to their having received a very pure blood during fœtal life; and greatly different in this respect from that sent to the trunk and lower extremities.

The validity of these objections, and others hereafter to be suggested, will appear in a subsequent part of this paper. Some remarks, however, in regard to the relative size of the ductus venosus and the umbilical vein, and of the ductus arteriosus and pulmonary artery, are proper in this connection.

I. *Relative size of the ductus venosus and umbilical vein.*

To settle this question, I carefully dissected fœtuses of from six to eight and a half months. They were not injected, from the fact that injection passes more easily through the ductus than through the liver, in a dead fœtus; and, therefore, the former becomes enormously distended, while the umbilical veins, and especially those in the substance of the liver, are less so. Hence it is impossible, in this way, to get a true idea of the relative size of these vessels. I have an injected fœtus at full term, in which the ductus venosus is $\frac{22}{100}$ inch (.22) in diameter, but contracting to $\frac{10}{100}$ (.1) just before entering the vena cava; while the umbilical vein is only $\frac{25}{100}$ inch (.25) in diameter, and the inferior cava is considerably *smaller* than the ductus. Each umbilical artery, moreover, is as large as the aorta actually is in the living fœtus at full term. It is from such exaggerations that we have heretofore acquired our ideas of the relative size of these vessels.

To avoid this source of error, I carefully dissected these vessels, and completely emptying them, laid them in their collapsed state upon a plain surface, expanded to their fullest width by the required manipulations and pressure. The width thus obtained equals the semi-circumference, or $\frac{11}{7}$ of the diameter. The results are not absolutely accurate, for reasons at once apparent. But when vessels of the same structure are thus compared (as veins with veins and arteries with arteries,) the relative size is thus more nearly obtained than in any other way which has occurred to me.

In a fœtus of about eight and a half months, I found the ductus venosus to have a semi-circumference of less than $\frac{5}{100}$ inch (.05;) and the umbilical vein of $\frac{15}{100}$ inch (.15.) In a fœtus of six months, the former had a semi-circumference of $\frac{4}{100}$ inch (.04,) and the latter of $\frac{12}{100}$ inch (.12)—the proportion being about one to three in both cases. Each of the three hepatic veins is quite as large as the ductus venosus; and these, with the latter, carry into the vena cava inferior all the blood brought from the placenta by the umbilical vein, and from the formative branches of the vena portæ. (Fig. 2d, 7.) Admitting that one of the hepatic veins is sufficient to transmit the last mentioned blood (and the small size of the vena portæ before entering the liver warrants this supposition) we have two hepatic veins and the somewhat smaller ductus venosus, to transmit to the vena cava *all* the blood from the placenta; and can perceive no adequate reason why the ductus should transmit more than one third of that blood. Anatomy leads to this inference; though anatomical *experiments*—injected preparations—have led to a different conclusion. We consider the former far more reliable. In the adult, the blood passes through the pulmonary artery and its branches, and through the capillaries of the lungs, and thence through the pulmonary veins into the left auricle—just as rapidly as it passes through the aorta, and just as rapidly as it could pass through the trunk of the pulmonary artery if it terminated at once in the aorta. Probably the same obtains in the case of the fœtal liver. The living blood passes rapidly through its capillaries, because nutrient changes are there going on; while an injection is first stopped by these minute vessels, then flows back through the large trunks to distend them, and finally distends to the utmost, the ductus venosus; and thus at last finds its way almost entirely through this passage into the inferior vena cava and the right auricle.

Therefore, it is believed to be within the limits of truth to say that not over one third, at most, of the blood returned from the placenta through the umbilical vein, is carried into the inferior vena cava by the ductus venosus.

II. *Relative size of the ductus arteriosus and pulmonary arteries.*

In a fœtus of six months, I found the semi-circumference of the pulmonary artery, before its division, to be $\frac{12}{100}$ (.12) of an inch; and that of the ductus arteriosus, $\frac{4}{100}$ (.04.) In a fœtus of eight and a half months, the semi-circumference of the pulmonary artery was $\frac{25}{100}$ (.25) inch; and of the ductus arteriosus, $\frac{8}{100}$ (.08) inch. In both cases the ductus was perceptibly smaller than either of the two branches of the pulmonary artery, sent to the lungs. In the older fœtus it was also somewhat smaller than either carotid artery; in the youngest I omitted to make this comparison. In these cases, I measured the vessels in a collapsed state, as before described. The ductus tapered towards its distal extremity, in the older fœtus; and was somewhat smaller at its union with the descending aorta, than the dimensions above given.

The *anatomical* inference is, therefore, that the ductus arteriosus does not transmit any more blood into the descending aorta than each branch of the pulmonary artery carries to its lung. If it be remarked that the blood may rush more rapidly through the ductus than through the pulmonary arteries, and therefore a greater quantity be discharged, I reply that it cannot be transmitted into a current more rapid than that in the descending aorta, with which it blends; and as the latter cannot be more rapid than that in the main trunk of the pulmonary artery (since the latter and the aorta, at their commencement, transmit the same amount of blood, as nearly as may be,) it follows that the current through the ductus is not more rapid than that through the pulmonary artery; and the ductus being one of its three branches, it is doubtless far less so. But, it will be remembered, that the two branches of the pulmonary artery, in the adult, transmit as much blood as the aorta, and, of course, with a rapid motion. Is there any assignable reason why the rapidity is not as great in the lungs of the fœtus as in the adult? or, therefore, why they will not transmit as much blood, in proportion to their capacity, and thus carry two thirds of that received by the pulmonary trunk, while the ductus arteriosus receives but one third of the

the same? We think not. But if it should hereafter be proved that the ductus carries even one half of the blood into the pulmonary trunk, into the descending aorta, from having a more rapid current than the two pulmonary branches, the relative size of the ductus and the pulmonary artery remains as before stated; and it will appear that the physiology of the circulation is the same, whether the proportion is greater or less within these limits.

The relative size of the *umbilical arteries* is also greatly exaggerated in injected preparations. Each of these is actually a little more than one half the diameter of the umbilical vein; and once and one half the diameter of the external iliac artery; still being hardly larger than the carotids. When, therefore, we consider how many branches have been previously given off, from the arch to the descending aorta, it cannot be supposed that more than one fourth, and probably not over one eighth of all the blood sent by the left ventricle into the aorta, can be by them returned to the placenta. Only the same amount is, of course, returned from the latter by the umbilical vein; and the mistake of supposing all the blood of the fœtus to be transmitted rapidly through the placenta, as that of the adult is through the lungs, is thus corrected; for the fœtus has a *reptile* circulation.

The accompanying figures will explain the preceding statements.

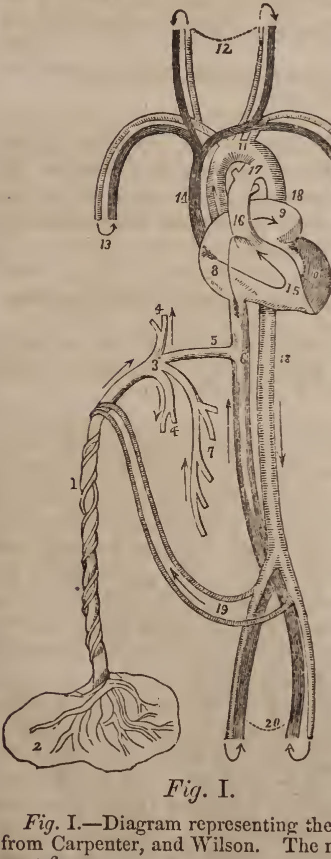

Fig. I.

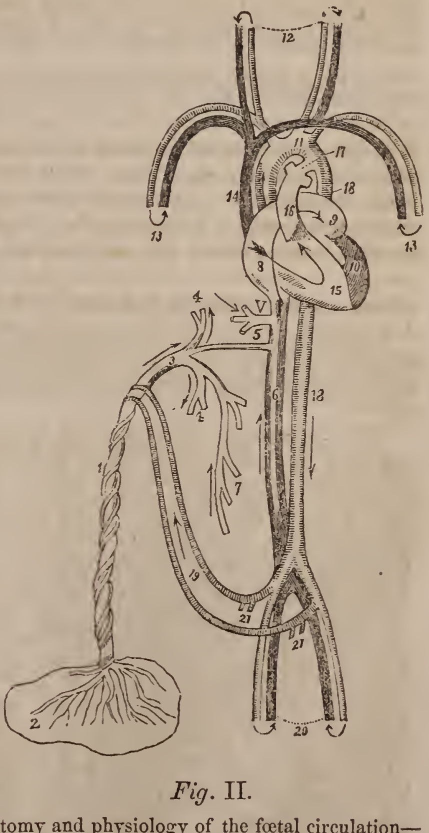

Fig. II.

Fig. I.—Diagram representing the anatomy and physiology of the fœtal circulation—from Carpenter, and Wilson. The numbers represent the same parts as those in the next figure.

Fig. II.—Illustrating the anatomy and physiology of the fœtal circulation—as demonstrated by the writer's dissections.

1—The umbilical cord, with its vein and two arteries, proceeding from 2, the placenta. 3—The umbilical vein, giving off, 4, 4, two principal branches entering 7, the vena portæ; and a third, 5, the ductus venosus (here of its natural size, as compared with 3 and 4.) which enters 6, the ineferior vena cava. V—The hepatic veins receiving all the blood carried into the liver by 4, and 7; and discharging it into the inferior vena cava above the ductus venosus. The three branches generally terminate separately in the vena cava. 6—The inferior vena cava. 7—Formative branches of vena portæ, from alimentary canal, &c. 8—The right auricle; the arrow indicating the course of the blood thence into 9, the left auricle. 10—The left ventricle. 11—The aorta. 12, 13—Arrows showing the return of blood from the head and superior extremities to 14, the superior vena cava; and thence into 8, the right auricle, and 15, the right ventricle; and, in the course of the bent arrow, from the latter into 16, the pulmonary artery. 17—The ductus arteriosus (actual size) terminating in 18, 18, the descending aorta. 19—The umbilical arteries (continuations of the internal iliac, and larger than the external illac) returning a part of the blood in the descending aorta to 2, the placenta. 20—The external iliac arteries, distributed to the lower extremities; the arrows at their extremities show the return of venous blood, by the iliac veins, to the inferior vena cava. 21—The remaining branches of the internal iliac (besides the umbilical arteries,) and which are distributed, as in the adult, to the organs in the pelvis, &c.

Fig. 1st is taken from Carpenter's Physiology, and is here introduced for the sake of contrast with the correct representation. Fig. 2d shows the relative size of the ductus venosus and umbilical vein; of the ductus arteriosus and the pulmonary arteries; and of the umbilical arteries and umbilical veins, &c. It also shows the trunks of the hepatic veins, hitherto omitted; and some branches of the internal iliac, to the pelvis.

I shall now proceed to examine particularly each of the six physiological propositions which have been given as embodying the received view of the fœtal circulation; in the course of which examination still other objections to this view will be suggested; and, finally, such conclusions will be deduced as the present state of physiological science demands.

Examination of the received view of the Physiology of the Fœtal Circulation.

In this examination I shall separately discuss the six propositions on pages 2 and 3, and will refer the reader to those pages to avoid repetition here. The passages which are italicized will demand a particular notice.

Proposition 1*st*.—Doubtless the placenta is a "*de*purating" organ, in its influence upon the blood of the fœtus; *i. e.*, the blood, while traversing its minutest vessels, parts with some of its carbonic acid gas, and receives instead, from the mother's blood circulating in the maternal portion of the placenta, an amount of oxygen gas. Thus the blood becomes aerated, and in the adult would properly be termed arterial blood. This pure blood is, however, not found unmixed in the arteries of the fœtus as it is in the adult, and therefore I shall term it instead, *placental* blood, to avoid all misunderstanding. The *arterial* blood, *i. e.*, the blood *in the arteries* of the fœtus, is a mixture of *placental* and *venous* blood, as will be shown.

But the pure *placental* blood, not more than one third, as has been seen, at once enters the inferior vena cava through the ductus venosus; the remaining two thirds, or more, being distributed to the liver through the vena portæ. The former one third, blending with the venous blood in the inferior vena cava (at least two or three times as much in quantity) is then carried as *mixed* blood (venous and placental, and probably considerably more than two thirds venous) into the right auricle, where we leave it for the present. The remaining two thirds of the placental blood are, 1st, blended with the venous blood brought to the liver from the formative branches of the vena portæ (fig. 2—7,) which may be equal to one third the placental blood in the vena portæ; and thus this also becomes mixed blood, and three fourths placental. But from this mixed blood, the liver is nourished; and thus, according to all analogy, it becomes entirely venous blood, on emerging from the capillaries of the liver into the radicles of the hepatic veins. This blood must, therefore, enter the right auricle from the inferior cava as venous blood; and thus the pure placental blood, passing through the ductus venosus, has been mixed with *five times** *as much* venous blood, at least, by the time it has arrived in the right auricle; and the mixture is now but one sixth placental, and five sixths venous blood. This, also, will be the blood to enter the left auricle, provided no further admixture previously obtains.

But it is also assumed that the fœtal *liver*, as well as the placenta, is a "depurating" organ; and, therefore, the blood discharged by the hepatic veins is arterial, *i. e.*, aerated blood, as well as that transmitted by the ductus venosus. By a *depurating* organ must here obviously be meant an organ that renders impure or venous blood arterial; or that eliminates carbonic acid gas from it, and replaces the same by oxygen. No one, however, it is believed, will distinctly assert that the liver has any such function as this.

It is well known that in the adult, the liver is an eliminator of carbon from the blood, and is, therefore, in this respect, a depurating organ. It is, however, such, only so far as it secretes bile; and in doing this, it does *not* convert venous into arterial blood. We may, therefore, admit that in the fœtus, also, the liver separates carbon from the blood, so far as it secretes bile; while at the same time, there is no reason to believe that it can possibly in any degree convert venous into arterial blood; or, much less, render placental blood more highly arterialized.

To what extent, therefore, the liver secretes bile in the fœtus, is an important inquiry in this connection. In the adult, bile is secreted for two entirely distinct objects,—1st, to aid the process of digestion; and, 2d, to separate, at the same time, certain hydro-carbon compounds from the blood, as a depurating organ, in the sense last specified. These impurities are separated from *venous* blood; and such as, being collected by the vena portæ from the alimentary canal and its appendages below the diaphragm, contains the crude elements of the food, abounding in the hydro-carbon compounds alluded to.

On the other hand, in the fœtus, the bile cannot be secreted in aid of digestion at all. Moreover, the blood from the alimentary canal does not here differ from venous blood in other parts of the fœtus; it being nowhere laden with the hydro-carbon compounds derived, in the adult, from the food. Very little bile, then, it may be supposed, is separated as an impurity from this venous blood in the formative branches of the vena pertæ, though a very small quantity may possibly be there separated. But there is no other source for bile besides, except the pure placental blood in the liver from the umbilical vein; and to suppose this secretion to be separated from arterial blood, is both to adopt an idea opposed to all analogy, and, at the same time, to assume a necessity for the production of such a secretion from elements assumed to exist in the placental blood; while there is not a shadow of reason for believing either in such a necessity, or in the existence of such elements.

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* *Twice* as much in inferior vena cava; *as much* from branches (7) of vena portæ, and *twice* as much from two hepatic veins.

But we are still pointed to the fact, that the meconium found in the alimentary canal at birth, contains some of the peculiar elements of bile; and to this fact we are by no means indisposed to give its due weight. It has already been admitted that the fœtal liver may secrete a small amount of bile from the venous blood derived from the formative branches of the vena portæ; and the following facts go to prove that the amount actually *is* very small. 1. The whole quantity of meconium secreted during fœtal life (none being evacuated till after birth) is small; and yet more than the last half of fœtal life* is required to produce the small amount found in the intestines at birth—a fact showing how slowly it is separated from the blood. But, 2d, only a comparatively small part of the meconium is actually bile. According to Dr. Davy's analysis,† 100 parts of meconium consist of—

Water, - - - - - - - -	72.7
Mucus and epithelium scales, - - - - -	23.6
Cholesterine and margarine, - - - -	0.7
Coloring and sapid matter of bile and oleine, -	3.0

Here we find less than 3.7 per cent. of matter peculiar to bile, while at least 8 per cent. of such matters are found in the pure secretion. The inference, therefore, is, that less than one half of the meconium is actually bile. Simon's analysis of *dried* meconium leads to a similar conclusion; it contained only 40 per cent. of matter peculiar to bile, while dried *bile* contains 80 per cent. of such matter.

We cannot, therefore, regard the fœtal liver otherwise than as a very feeble depurating organ, though it is such in the sense last explained. But I submit that the bile is secreted, not merely to depurate the blood of the fœtus, but to secure the discharge of the mucus and epithelium scales from the alimentary canal immediately after birth, and thus to prepare it for the reception of food. At all events, it is believed that the conversion of the placental blood into venous, in the capillaries of the liver, as before explained, would far more than compensate for all the depurating power the liver can possess as a secretor of bile; and, therefore, that the placental blood transmitted by the hepatic veins into the vena cava does *not* enter the latter vessel in a purer state than it entered the liver.

Consequently, it does not leave the fœtal liver "in the condition of arterial blood;" and to say that, after it enters the vena cava, it "loses this character in some degree by the time it arrives at the heart," has been shown to be altogether too feeble an expression to cover the facts—five sixths of *all* the blood entering the right auricle from the vena cava inferior being venous.‡

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* No meconium is found in the duodenum till the fourth month is completed.

† Simon's Chemistry of Man, Vol. II.

‡ This proposition is adopted, it will be remembered, on the calculation that the ductus venosus carries one third of all the placental blood into the vena cava inferior. But if even *one half* be assigned to this duct, and no allowance at all be made for the blood carried into the liver by the formative branches of the vena portæ, it would still follow that three fourths of all the blood poured into the right auricle from the inferior cava is venous blood. No one, it is believed, can demand such an assignment, however, with a knowledge of the facts I have stated, or will doubt that five sixths is a more accurate calculation.

Why, then, is the liver so enormously developed in the fœtus, if not a powerful depurator of the blood, as a secretor of bile? Because it has another entirely distinct and but recently discovered function to perform. But this question will be more appropriately answered in our remarks on the sixth proposition.

Proposition 2d.—In regard to the non-admixture of the blood from the inferior vena cava (five sixths venous,) while in the right auricle, with that entering the same cavity from the superior vena cava, certain doubts have already been expressed. Of course, all belief in the complete non-admixture is based upon the supposed peculiar action of the Eustachian valve, which, it is said, carries it at once through the foramen ovale into the left auricle. It has been shown that Dr. Reid's experiments on this point are entirely inconclusive, and that, on anatomical grounds, it is as probable that this valve has a more important relation to the circulation through the inferior vena cava, than to that through the foramen ovale. But such as still insist on this non-admixture, are requested to explain how, by any *possibility*, the two auricles can contract from 140 to 150 times a minute, as in the fœtus, without securing some admixture, through the foramen ovale, of the blood distending the two auricles? And if this result does occur at all, then the object of the supposed non-admixture of the two currents in the right auricle is just so far frustrated; and it is hardly probable that a special mechanism is provided to keep the blood from mixing when it first arrives in the right auricle, and another which secures its admixture the $\frac{1}{140}$th part of a minute afterwards. Or, if it be remarked that the *valve* of the foramen ovale prevents the mixture of the blood *through* the foramen, we will recur to the period of fœtal life, when there was no septum at all between the auricles, and the subsequent period when the foramen exists, but no valve is yet formed. Must there not be a *complete* admixture of all the blood in the auricles up to this time? And must not this admixture through the foramen continue, only diminishing in proportion as the valve of the foramen becomes more complete.

In a fœtus of somewhat more than six months, I find the valve occludes near three fourths of the foramen, and in one of eight and a half months, about five sixths of it. It will, therefore, admit still of a considerable degree of mixed blood through it; and not until the foramen is completely closed (which, of course, never occurs till after birth,) can all admixture through it be prevented. but this partial prevention of admixture is not the object of the development of the valve of the foramen, merely incidental to its formation. Nor is the well-being of the fœtus at all compromised by such admixture, though the contrary has been hitherto affirmed. The following considerations will illustrate this point.

It has already been stated, that at one period of fœtal existence, the circulation is analogous to that of a fish. At this time the heart consists, as in the fish, of a single auricle, a single ventricle, and a bulbous arteriosus. Subsequently, the ventricle is divided into two cavities, by the formation of a septum, completed at the ninth week; and now the fœtal heart is, in respect to its function, precisely that of the reptile, and consists of two ventricles and a single auricle.* This is, in fact, the type of the fœtal circulation till birth. The septum between the two auricles, first appearing at about three months, is for some time very imperfect, from the opening called the foramen ovale remaining very large; then the valve of the foramen ovale gradually diminishes the opening, as it increases in size, and in the same proportion interferes with the mixture of the blood in the two auricles during their contraction. But we must regard the formation of the valve merely as a gradual approximation to the type of circulation to come at once after birth, and to the construction of the true *mammal* heart—of two auricles and two ventricles—which is required by that new mode of existence. We can only say, the valve, by its gradual development before birth, has, by that time, produced a *mammal* heart, *as nearly as is consistent with a reptile circulation;* and which may at once act as a mammal heart when birth takes place. The foramen ovale is perfectly closed in about eight days after birth; and then the true mammal heart becomes perfect, in structure as well as function.

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* The precise difference between the fœtal and the reptile heart, in *structure*, will appear on a subsequent page.

But though the valve of the foramen ovale *may*, incidentally, to some extent prevent admixture of the blood in the two auricles, while they are contracting during the last few weeks of the fœtal life; still, this result is of no importance whatever, since it will now be shown that the blood in the left auricle is, on its first arrival in that cavity, probably quite as impure as that in the right auricle.

This proposition implies that the Eustachian valve does *not* prevent an intermixture in the right auricle of the blood from the inferior vena cava with that from the superior cava, by directing the former current at once from the vein through the foramen ovale—as is assumed. Objections to Dr. Reid's experiments have already been made, and others will now be added.

1st. If the Eustachian valve is formed to turn the current from the inferior vena cava at once through the foramen ovale, it must be admitted that its position is very unfavorable for the accomplishment of that object. The best position would evidently be secured, if it projected from the outer wall of the vein, and thus presented its free border towards the foramen ovale, in a line extending antero-posteriorly. According to my observations, it actually projects from the anterior wall of the vein, though obliquely, so as to terminate at the antero-inferior border of the foramen ovale. Sometimes, however, it is attached even to the middle of the posterior, or left, border of the foramen ovale; a position far more unfavorable than the one just mentioned. A glance at the following figure will illustrate this point.

2d. It has been remarked, that if the Eustachian valve does keep the purer blood from the inferior vena cava from mixing with the less pure blood from the superior cava, we should expect it would remain perfect till birth; while in fact it becomes atrophied from the seventh month, and continues to diminish, while the valve of the foramen ovale increases in size.

3d. The increase of the latter valve, while the Eustachian is diminishing, might seem to imply that the former comes, in some degree, to supply the place of the latter. But it is impossible that the former can, in any degree, direct the blood from the inferior vena cava *through the foramen ovale.*

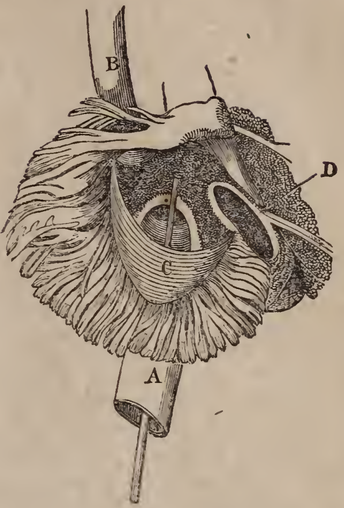

Fig. III.—Modified from Weber. The Eustachian valve at six months. A—Inferior vena cava. B—Superior vena cava. C—Eustachian valve in front of termination of A; its inner extremity attached even to the middle of the posterior border of the foramen ovale, D. The upper end of the probe, passing through the inferior vena cava, rests on the posterior wall of the right auricle; and just below it is the opening of the coronary vein, partly closed by its valve.

It is inferred, therefore, that the Eustachian valve is not formed to "prevent in great degree, if not entirely," the admixture of the blood from the inferior with that from the superior cava. That it may have some effect of this kind while the valve is largest, is possible; but this possible effect is incidental to another function, and in itself, if actual, is of no physiological importance whatever.

What, then, is the true function of the Eustachian valve? After much reflection and study of its forms and relations, the ideas of Winslow,* published nearly one hundred and fifty years ago, seem the most philosophical, viz., that it opposes the regurgitation of the blood from the right auricle into the inferior vena cava; while it also, as Lancisi maintained, prevents the current from the superior cava from falling too forcibly upon that of the cava inferior. The effects of such a regurgitation in preventing the arrival of the placental blood in the heart, need not be specified; and it is equally apparent that if this be the true function of this valve, it is replaced, so far as regurgitation, from the left auricle, and then into the inferior cava is concerned, by the valve of the foramen; and therefore in proportion as the latter is developed, the former may become atrophied, as already explained. It may, also, be added, that the position of the Eustachian valve, though unfavorable for directing the blood through the foramen ovale, is the only possible one in which it could both prevent regurgitation and break the impetus of the current from the superior vena cava, and, at the same time, *not much* OBSTRUCT the passage of the blood through the foramen ovale. These three results are, however, unimportant after birth, and when no placental or arterial blood is to enter the right auricle; and hence the valve is atrophied and useless after that event.

3*d* *Proposition.*—Before entering upon this, we may recapitulate the two principal points just established, viz:

1. That of the blood arriving in the right auricle from the inferior vena cava, about one sixth is pure placental blood, and five sixths are venous; and,

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* Memoires de l'Academie Royale. 1717.

2. That the Eustachian valve has little, if any power (and none, certainly, in the last part of fœtal life) to prevent the admixture of the blood arriving in the right auricle from the two vena cava.

Now, admitting that the superior vena cava discharges but one half as much blood as the inferior—and which is certainly a sufficiently *low* estimate—it will add three parts more of venous blood to the three of venous and one of placental blood from inferior vena cava; and thus, of all the blood filling the right auricle, one ninth will be placental and eight ninths venous.* It has also been shown that the same mixed blood must enter the foramen ovale and fill the left auricle, except so far as the Eustachian valve may possibly, incidentally, and in less degree as the full term approaches, direct a somewhat larger proportion of the blood from the inferior cava through that opening, than of that from the superior cava. If, however, any difference as to the purity of the blood in the two auricles be produced in this way, it must be before the Eustachian valve is much atrophied; and, therefore, at the time when the valve of the foramen ovale being still slightly developed, the blood in the two auricles will be mingled through the foramen ovale at each contraction. We, therefore, conceive no essential difference as to the purity of the blood in the two auricles can exist. If, however, it be still asserted that the blood would not be mixed to any considerable extent through the foramen during the last four to six weeks before birth, let it be remembered, both that the Eustachian valve cannot then perform its assumed function, and also that the blood in the left auricle is constantly rendered less pure by the venous blood entering it directly from the lungs, through the pulmonary veins. The amount of venous blood thus returned is far greater than has been hitherto admitted, being about two thirds of all sent through the pulmonary arteries. The improbability is therefore extreme, that the blood in the left auricle is essentially, or indeed in any degree, purer than that of the right auricle. It may also be remarked that the dilitation or *diastole* of the auricles, exerting a suction power on the blood entering these cavities from the veins, would also commingle the blood as it enters the right auricle, and then passes through the foramen ovale to the left; and even before the auricular contraction takes place.

We, therefore, perceive that when the ventricles contract, after receiving the blood from the auricles, the *left* ventricle does *not* send "arterial" blood, *before undergoing any admixture*, into the ascending aorta, &c.; but it sends a *mixed* blood, probably eight ninths venous (and certainly more than five sixths venous) into that vessel. Neither does the *right* ventricle send more *venous* blood into the pulmonary artery and onwards; the latter blood being as pure as the former, or five sixths to eight ninths venous.

The same is true of the reptile, though the heart of the latter consists of two auricles and but a single ventricle. One auricle receives the venous blood from the whole body, like the right auricle of the human adult; the other receives the aerated blood from the lungs. Both contracting simultaneously, these two kinds of blood are forced into the single ventricle, and there mixed; and the latter sends this *mixed* blood through the aorta to the body generally, and also through another much smaller vessel—the pulmonary artery—to the lungs, for further aeration; equally pure blood being sent through both these vessels.

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* If three fourths instead of five sixths be insisted on, (note, p. 13,) then the blood filling the right auricle would be one sixth placental and five sixths venous. In either case, its *highly venous* character is established.

The fœtus has a *single auricle* (*actually* at the third month and later, and *practically* until birth,) and two ventricles. Yet, precisely as in the reptile, the same *mixed* blood is poured into the aorta and the pulmonary artery; it being mixed, in the reptile, in the single ventricle, and in the fœtus, in the (practically) single auricle, before it enters the double ventricle. Why, then, is not the auricle of the fœtus double and the ventricle single, as in the reptile? A little reflection will show that the arrangement actually existing in the fœtus is the only simple one which is compatible with the requirements of the case; viz: a *temporary reptile circulation to be instantly changed to a permament mammal circulation.*

What has so long been taught, therefore, in regard to the ductus arteriosus carrying *venous* blood into the descending aorta for a particular reason, must at length fall to the ground.

4th Proposition.—It does *not*, therefore, follow that the "head and superior extremities are supplied with blood *nearly as pure as that from the placenta*," though it is true that these parts are developed in advance of the trunk and lower extremities. Nor is it the fact that the last mentioned parts are supplied with a less pure blood than the others. It has been shown that the pulmonary artery receives *as pure* blood as the aorta. This is necessitated, also, from the physiological fact that the pulmonary artery is the *nutrient* artery of the lungs;* as the history of the development of these organs clearly indicates; though it would carry me too far from my present purpose to explain this point at length. It has also been shown that the blood entering the aorta from the left ventricle is as impure as that contained in the right side of the heart. If still farther proof is required, it may be remembered that in cases of cyanosis, or patency of the foramen ovale after birth, the livid color of the face, and all other parts of the surface, affords a visual demonstration of the assertion that the aorta circulates highly *venous* blood. And can we suppose the blood in the aorta is purer before birth than afterwards?

It has been assumed that the earlier development of the head and superior extremities, is at the same time an effect of their being nourished by a purer blood, and also a proof of such superior purity—a good illustration of what logicians term "reasoning in a circle." It has been shown that no such difference in the purity of the blood can exist. But this question will also be briefly considered, on independent grounds, since so much importance has been attached to this assumption.

It is true that the organs of sensation, deglutition, and prehension, are early needed and early developed; and this implies an early development of the brain and spinal cord—and, in a word, of the head and superior extremities. These parts are also supplied with blood from the arch of the aorta. But it is equally true, that the alimentary canal, and the urinary apparatus, are quite as far developed at birth; though the latter organs are all supplied by the descending aorta. A difference in the purity of the nutrient blood cannot, therefore, account for the more early development. Or, if it still be insisted that we may thus account for the facts, how, then, shall blood of *equal* purity, sent to the upper and lower extremities *after* birth, enable the latter to gain upon and overtake the advanced development of the former?

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* Dr. Heale has recently demonstrated the same proposition, and shown that the bronchial arteries only give the vasa vasorum to the pulmonary, and supply the pleura, also, in part. See April ('54) No. of the MONTHLY, p. 302.

And, again, if a purer nutrient blood produces a more rapid development of the head and superior extremities of the human fœtus, the same should obtain in all the mammalia—the fœtal circulation being in all essentially the same; and we may inquire, why the posterior extremities of the calf, the sheep, and the dog, are, at birth, equally developed with the anterior extremities and the head?

Thus comparative physiology again leads us to the conclusion that there is no difference as to the purity of the blood contained in the ascending and the descending aorta, as it previously has indicated that the blood in the pulmonary artery and the ascending aorta are, in respect to purity, the same.

How, then, shall we account for the earlier development of the head and superior extremities? We can only say it is an ultimate fact—*a law of development.* And yet, it is certainly no more difficult to explain how they are *first* developed while they receive the *same* blood as the lower extremities, than it would be to explain why the alimentary canal and kidneys are *equally* developed with them, on the other supposition—that the latter are nourished by an *inferior* blood.

The great law of development appears to be, that "the parts and organs first needed are first developed;" and is applicable also to different parts of the same apparatus, and even to different portions of the same organ, e. g., the ribs are developed earlier than the sternum—the bones at the base of the cranium earlier than those of the vertex—the laminæ of the vertebræ before the bodies, and those of the dorsal region first of all—and the organ of sight previously to that of smell. But, as the parts and organs needed, immediately after birth, vary in different animals, we find a corresponding difference in development up to that period. The young of the marsupialia, remaining, for some time after birth, in a pouch, and attached to the mammilla of the mother, is an embryo, rather than a fœtus, when born, so far as development is concerned. The herbivora and carnivora, needing immediately to be able to stand and walk, have all the four extremities equally developed at birth. The human infant is very differently circumstanced in this latter respect; and to distend the uterus during gestation with a pair of well-developed inferior extremities, which are not to become available for several months after birth, would certainly be productive of some inconvenience, without any compensating advantage; especially since, as things now are even, the motor powers of these less-developed limbs are not seldom by mothers found to be inconveniently energetic.

Thus, the idea of a purer blood being sent to the head and upper extremities, is shown to be untenable, from whatever point of view we consider it. And, as it was suggested at first, from a mere desire to account, and for the special purpose of accounting for the earlier development of the upper parts of the fœtus—and other facts have been perverted to support it—it is, at last, high time to remand it back to the brain, now long since mouldering in the dust, which first conceived it.

5th Proposition.—We have next to show the incorrectness of the assertion, that "in the fœtus the lungs are solid and *almost impervious;*" and that the "*greater part*" of the blood in the pulmonary artery "rushes through the ductus arteriosus" into the descending aorta.

It is true that the fœtal lungs are more solid than they are after birth, but no more so than the liver or the kidneys; and therefore we discover no reason why they are more impervious to the circulation than these organs—which transmit an abundance of blood. Moreover, we have discovered a reason for admitting a free circulation through the fœtal lungs, in the comparatively large size of the pulmonary arteries and veins; and a *necessity* for such a circulation, since the pulmonary arteries are the *nutrient* arteries of the lungs. It has been seen that, if we may judge from the size of the two branches of the pulmonary artery, compared with that of the ductus arteriosus, about two-thirds of all the blood sent from the right ventricle traverses the lungs, and is, of course, returned as *venous* blood to the left auricle, by the pulmonary veins. In the fœtus, a *mixed* blood is sent through the lungs for their nutrition, for entirely venous blood will not accomplish that object; in the adult, *venous* blood is sent through the lungs first for "oxydation," or aeration; and secondly, for the nutrition of the lungs after aeration is secured.*

Thus, also, the "greater part" of the blood in the trunk of the pulmonary artery does not rush through the ductus arteriosus—only about one-third of that blood is transmitted through this duct. It has also been shown that the blood it transmits is as pure as that sent through the left auricle directly into the ascending aorta. The ductus does not, therefore, terminate in the descending aorta, in order to avoid mixing its impure blood with that sent to the head and upper extremities, but for some other reason; and we deem it unnecessary to look for it beyond the fact that the commencement of the descending aorta is the *nearest* point in that vessel which the ductus can enter. What, then, is the true function of the ductus arteriosus? It is, we conceive, merely a "waste pipe," to conduct at once into the aorta all that part of the blood in the trunk of the pulmonary artery which the collapsed fœtal lungs cannot receive. Hence, as soon as the lungs are distended by the first inspiration, and thus made capable of receiving and transmitting *all* the blood sent from the right auricle and ventricle into the trunk of the pulmonary artery, the ductus becomes at once useless, and, together with the foramen ovale and the ductus venosus, becomes completely closed about eight days after birth.†

But while the fact is insisted on, that the pulmonary artery and the aorta carry equally pure blood, it must be remembered that in both these vessels there is not more than one part of pure placental blood to six or eight of venous blood. Thus the blood in the arteries of the fœtus is but slightly more pure than the venous blood of the adult. It seems to have been taken for granted that the organs of the fœtus (the head and upper extremities, at least,) must be developed from pure arterial blood—blood as pure as the arterial blood of the adult. It is now apparent that no such blood exists in any artery possessed by the fœtus; but only in the umbilical vein, and the ductus venosus. All the organs of the reptile are also developed from a mixed blood.

But while blood of equal purity is sent through the pulmonary artery and the aorta in the human fœtus, the blood returned to the placenta for farther purification is just *as pure* also. The umbilical arteries are merely continuations of the internal iliac arteries, and, of course, contain the same blood as the aorta. But here, again, the analogy to the reptile is perfect; the *mixed* blood in the single ventricle being sent, in part, through the pulmonary artery and lungs for further aeration, while the rest is sent through the aorta and its branches, for the nutrition of the body generally. In the reptile, moreover, the pulmonary artery is smaller than the aorta, and less blood passes through the lungs than through the aorta and to the tissues generally. In the fœtus, also, much more blood passes through the aorta than to the *placenta*—it having been shown that the umbilical arteries cannot transmit more than one sixth of all the blood received by the aorta at its commencement. In the human adult, as much blood is sent through the lungs as through the aorta and its divisions; and it is calculated that the whole mass in the body may pass through them, and therefore become aerated in the space of three minutes; the standard of aeration in the adult is therefore high. In the fœtus, on the other hand, the umbilical arteries can return the blood to the placenta only about one sixth as rapidly in proportion as it is circulated through the lungs in the adult; and, therefore, the standard of aeration in the fœtus, as in the reptile, is low. And the *mixed* blood in the umbilical arteries being returned as pure *placental* blood by the umbilical vein, this low standard of aeration of the mass of blood in the arterial system of the fœtus is thus constantly maintained, though the quantity of *pure* blood returned to the heart through the ductus venosus is so small.

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* For an explanation of this, see the MONTHLY, April No., 1854, p. 303.

† Billard found that of nineteen infants who had lived but one day, the foramen ovale was completely open in fourteen; in two it had begun to close; and in two it was completely shut. Of twenty who had died on the eighth day, five only still had the foramen open.—*Traité des Maladies des Enfans nouveau-nés.* 1828.

There are other peculiarities of arterial fœtal blood, besides its *venous* character and appearance, as (compared with the mother's blood) its abundance of colored corpuscles, and its deficiency of fibrine. But, upon these peculiarities I need not dwell; nor is farther proof required, it is believed, of the incorrectness of the proposition now under consideration. And should it, at any time, be proved that even one half of the blood in the trunk of the pulmonary artery traverses the ductus arteriosus, its physiological inaccuracy would remain unchanged.

6*th Proposition.*—There can be no doubt that the large size of the fœtal liver is the direct result of the distribution to it of a large amount of the pure placental blood. Indeed, it has been shown that while other organs in the fœtus are nourished from a mixed blood (not more than one sixth placental) this organ alone is nourished by a mixture of three fourths placental blood. A comparatively early and enormous development might reasonably be expected, therefore; and it is found actually to obtain.

But we cannot regard this enormous development as merely a casual result of the distribution of a great amount of pure blood to the fœtal liver, as the quotation constituting the proposition now under consideration seems to imply. We believe the law of development, before mentioned, is as applicable here as elsewhere; and that the blood is sent to the liver on purpose to develop it—it being largely and early developed, because early needed, in the fœtal economy.

What, then, is the function of the fœtal liver requiring so early and so enormous a development? The liver of the reptile is also largely developed, and here we discover another analogy with the human fœtus. We have also seen, that it cannot be as a secreter of bile that the liver is so early needed. Bile is not found in the intestine at all till the fifth month; and it has been shown that only a small quantity, in the aggregate, can have been secreted previously to birth. On the other hand, the liver is one of the first organs becoming distinct in the embryo; constituting, at from three to five weeks, over one half the weight of the entire embryo; almost entirely filling the abdomen at twelve weeks; and constituting $\frac{1}{18}$ part of the weight of the whole body at birth. The inference is, therefore, that the liver performs some functions before it becomes a secreter of bile, to a perceptible extent—

that this is a more important function than the one later manifested—and that it continues in full activity till birth, when it diminishes.

Those who are familiar with the recent experiments of Bernard, of Paris, will not hesitate to decide, that the function of the liver, as a *blood-making* organ, is the one in question. For, it must not be forgotten, that the fœtus makes its own blood; not deriving a particle of *blood* from the mother's vessels, but merely the *elements* from which it forms its own vital fluid. That the liver is the organ most important in the blood-making process, has been demonstrated by Bernard; and surely, there is no time when its action is so much required as when the first blood is to be formed, and increased, and all the tissues are to be developed—from elements obtained from the blood of the mother. Hence the large development of this organ in the fœtus.

But the liver actually diminishes in size at once after birth—the diminution affecting principally the left lobe; and which, in the fœtus, is about as large as the right. Indeed, it is not till the infant is from ten to twelve months old that the liver has again become as large as it was at birth. Doubtless the withdrawal of the pure placental blood from this organ at birth, and the substitution of mere venous blood in the vena portæ, is the immediate cause of this atrophied condition of the organ for a time. Still we cannot regard this condition as merely accidentally owing to that cause. The blood of the new-born infant is to be formed from elements contained in food, and not derived as before, directly from the mother's blood-current. True, the milk naturally destined for its nourishment is also obtained from the mother's blood. But the gland secreting it has elaborated its elements from the blood; and, it being digested before entering the liver, less of the peculiar action of the latter organ is probably required in the blood-making process. When, however, the child begins to take a variety of aliment—or when somewhat more than a year old—the liver is found to have regained its weight at birth, and now gradually proceeds to its full development in the adult, when it constitutes about $\frac{1}{36}$ part of the entire weight of the body. These remarks are, however, made, not so much to explain the atrophy of the liver after birth, but as naturally suggested by and associated with its occurrence.

The vena portæ in the fœtal liver is, therefore, in all respects, an *artery;* it carries the pure blood from the placenta, and is the *nutrient* artery of the liver, as the pulmonary is of the lungs. It is, however, also, something more. The formative branches constitute the true vena portæ in the fœtus, as well as in the adult; and, therefore, its branches in the substance of the liver, containing the venous blood from these—mixed with the placental blood before explained—represent the vena portæ in the liver of the adult, containing only venous blood, from which the bile is secreted—at the same time that it is the only nutrient artery of this organ. After birth, the hepatic artery, which, in the fœtus, does hardly more than afford the vasa vasorum to the vena portæ, becomes the sole nutrient artery of this organ, as it alone transmits arterial blood. For the assumption appears well founded, that after birth the tissues can be developed and repaired from arterial, or completely aerated blood alone; while the tissues of the fœtus are formed, as have been proved, from a mixed blood, of which—except in case of the liver alone—the venous forms from five to eight times as large a proportion as the placental or aerated blood.

Having completed my examination of the propositions under consideration, I now conclude with a recapitulation of the conclusions which have been arrived at, and which together constitute, it is believed, such a view of the fœtal circulation, during the last half of fœtal life, as the present state of physiological science demands.

The view of the fœtal circulation required by the present state of physiological science.

1st. The human fœtus, during the last half of fœtal existence, has a *reptile* circulation—the mammal circulation commencing at birth; and the structure and the function of each particular part of its circulatory apparatus are in subservience to this fundamental fact. The characteristics of a reptile circulation are—1, the circulation of a *mixed* blood, and of the same degree of impurity, through both the aorta to the tissues, and through the pulmonary artery to the lungs; and 2, the transmission of far less blood to the aerating apparatus than is sent through the aorta.

2. The foramen ovale with its valve is the only simple mechanism which could answer the requirements of the case, viz., a temporary reptile circulation, with a capability of instantaneous change to a permanent mammal circulation, the foramen becoming permanently closed about eight days after birth.

3. The ductus arteriosus is merely a "waste pipe," conducting into the nearest portion of the aorta that part of the blood sent into the trunk of the pulmonary artery, which the collapsed lungs of the fœtus are unable to receive. After birth the latter admit all the blood, and the ductus is, therefor, useless. It does not enter the descending aorta to avoid sending its blood to the head and upper extremities.

4. Though the lungs are more solid in the fœtus than after birth, they are probably permeated by about two thirds of the blood entering the trunk of the pulmonary artery, and this is returned as *venous* blood to the left auricle.

5. The blood arriving in the right auricle from the two venæ cavæ is completely intermixed by the diastole and systole of this cavity; and the same mixed blood is therefore transmitted through the foramen ovale into the left auricle. Or, if by any possibility more placental blood enters that cavity, the venous blood returned by the pulmonary veins most probably counterbalances that advantage.

6. The Eustachian valve cannot prevent the admixture of the blood from the venæ cavæ, nor direct that from the inferior cava at once through the foramen ovale; it merely prevents regurgitation from the auricle into the inferior vena cava, at the same time incidentally preventing the current from the superior cava from impinging so forcibly upon that of the inferior. Hence the valve of the foramen ovale replaces it to some extent, in respect to its principal function; and, therefore, it becomes atrophied in proportion as the latter is developed.

7. No artery in the body of the fœtus contains *arterial* blood. The aorta and pulmonary artery, and all their branches, contain a *mixed blood*, about five parts, at least, venous, to one part placental. The precise proportions, however, are unimportant, the blood being of a *highly venous* character, and as impure in the aorta as in the pulmonary artery. Only the umbilical vein and the ductus venosus contain pure aerated placental blood.

8. The umbilical arteries contain the same mixed blood as the aorta, and possibly return one sixth of the blood received by that vessel; but this amount, aerated in the placenta and returned by the umbilical veins, suffices to maintain the low standard of aeration in the fœtus.

9. The head and upper extremities of the fœtus do not receive a purer

blood than the lower parts of the body. They, as well as the digestive and urinary apparatus, are earlier developed, in accordance with a general law of development.

10. The fœtal liver is a *depurating* organ only so far as it secretes bile, and therefore, to a slight extent, though it does not thus convert venous into arterial blood. Its large development, from the placental blood abundantly distributed to it has relation to its function as a *blood-making* and not as a *bile-secreting* organ; and this blood becomes *venous* in the capillaries and the hepatic veins, as all analogy proves.

11. The trunk of the vena portæ is, in the fœtus, both the *nutrient artery* of the liver, and also corresponds to the vena portæ of the adult—its formative branches containing venous blood from which the bile in the meconium is probably secreted.

12. Anatomy, the history of development, and comparative physiology, combine to sustain the preceding propositions.

Bowdoin College, April 1, 1854. [*American Med. Jour.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, AUGUST, 1854.

No excuse is necessary for occupying this number almost exclusively with Prof. Peaslee's Monograph. The well-known character of its author will entitle the propositions there advanced to the candid examination of all who know him.

AMERICAN MEDICAL ASSOCIATION. The seventh annual meeting of this Association was held at St. Louis on the 2d, 3d, 4th and 5th of May last. We would gladly lay before our readers "the doings," but even an abstract would occupy most of an entire number, and we cannot spare the room. They met, spent the usual number of days, enjoyed the hospitality of our western brethren, had a "good time," and adjourned to meet at Philadelphia next May, when we hope to be there to see for ourselves.

The chairman of the committee of publication was selected from New York, instead of Philadelphia as in years past; whereupon the delegates from the latter city manifested a very baby-like spirit of resentment. It is to be regretted that there are men who cannot refrain from manifesting a spirit of mean and selfish jealousy in an association of so broad and national a character as this.

CHOLERA. The newspapers are teeming with particulars of the present prevailing epidemic. It has thus far pursued the same course, and visited nearly the same localities, as in its former visitations.

As on all former occasions when it has prevailed epidemically, this disease seems to have first appeared in Asia, and has steadily pursued its way westward. One year ago, we were receiving reports of its fatal violence in many European cities, and of its gradual approach towards our own country; and now, in accordance with expectations founded on its past history, we are watching with a melancholy interest its progress and heart-rending effects in our own towns and cities. It prevails to an alarming extent in nearly all those places which have been visited by former epidemics. New York, Chicago and Montreal are suffering severely, and in some small towns the mortality has been appalling. Although prevailing to a considerable extent in Boston, it would seem to be relatively less than in many smaller and less exposed localities. Our own State, which has fortunately enjoyed such immunity in past years, has mostly escaped as yet; but with the habits of filth and want of care for their health, which prevails among much of the foreign population in our manufacturing places, its prevalence in such localities is rather to be expected than otherwise.

New Hampshire Asylum for the Insane. The twelfth annual report of the Visitors, Trustees, and Superintendent of this institution is at hand, and shows it to be in a condition of unabated prosperity. The following, from the report of the accomplished Superintendent, gives a true idea of the state of affairs during the past year:

"The year now gone has been one of prosperity. Unmarked in our small history by any extraordinary event, its days have passed quietly and rapidly on, each bringing its changes, cares and trials, and each abundant reasons for thankfulness to God.

"Many who were with us at its commencement, and whose future no man could foretell, are now at their homes, and in the possession of firm health and recovered reason, discharging the ordinary duties of life. Others, less favored, still remain here, and are the objects of our daily care, and others still, whose realities for years were fearful fancies and groundless griefs, have found at length in death a freedom from delusion and sorrow, eternal and complete.

"During the whole of the year our household has enjoyed remarkable physical health. We have been entirely exempt from epidemics of all sorts, and acute disease has been almost unknown. Cleanliness, regularity of life, and a most healthful location, have been the chief causes of this desirable state of things. The deaths which have occurred, with a single exception, were of those who for a long time had been considered incurably insane, and who at last were literally worn out by the continued and unremitting force of their malady.

"The following tables will give you the usual statistical information:

No. 1.

Statistics of the Asylum for the year 1853–4.

	Males.	Females.	Total.
Patients under treatment, May 31, 1853,........................	70	73	143
Number received since, to June 1, 1854,........................	72	69	141
Number discharged since “ “	67	56	123
Number died since “ “	7	7	14
Number committed by courts to June 1, 1854,..................	4	0	4
Number committed by cities and towns to June 1, 1854,.......	21	12	33
Number committed by their friends, to June 1, 1854,.........	42	54	96
Number committed at their own request, to June 1, 1854,....	5	3	8
Number discharged recovered, to June 1, 1854,................	34	29	63
Number discharged partially recovered, to June 1, 1854,......	14	10	24
Number discharged unimproved, to June 1, 1854,...............	12	10	22
Whole number under treatment during the year,...............	142	142	284
Greatest number under treatment at one time,..................	82	84	166
Smallest number under treatment at one time,..................	69	70	139
Number remaining under treatment, May 31, 1854,...........	77	84	161

No. 2.

Causes assigned for the insanity of those admitted.

Ill health,..............................	28	Puerperal,..............................	2
Exposure and excesses,..............	12	Hard work,..............................	4
Masturbation,..........................	18	Injury of the head,..................	2
Intemperance,..........................	12	Healing of an ulcer,................	1
Domestic trouble,.....................	13	Political excitement,................	1
Loss of friends,........................	2	Fright,...................................	1
Religious,...............................	6	Tobacco,................................	1
Disappointment,.......................	3	Old Age,................................	1
Pecuniary difficulties,...............	2	Sun stroke,.............................	3
Epilepsy,...............................	2	Unknown,...............................	27

New Orleans Medical News and Hospital Gazette. This is a semi-monthly journal, edited by Drs. Choppin, Beard, Schlater & Boyer. who are all connected with the hospitals of the city of New Orleans. Though fearful that so many cooks must in the end have trouble, we must say they have, for five months, got along bravely, and have produced a journal second to none in the Union. They have abundant materials at their command, and have used them to good advantage.

Indiana Medical Journal. We have received the first number of a quarterly with the above title, to be published at Evansville, Indiana, and edited by Drs. W. H. Byford and Hugh Ronalds, Professors in the Evansville Medical College. This first number is a good one, and we bid our western brethren a cordial welcome.

GEORGIA BLISTER AND CRITIC. We gladly enter on our exchange list this new periodical. It is a monthly of 32 pages, published at Atlanta, Ga., and edited by H. A. RAMSEY, M. D., and is, as the title-page declares, "Devoted to the Development of Southern Medical Literature, and the Exposition of the Diseases and Physical Peculiarities of the Negro Race." Whatever Dr. R. thinks right, he advocates with an energy and boldness to which natives of our colder climate are not much used. To be sure, we are personally very much inclined to call all things (and acts, too,) by their right names, and to "speak right out in meetin'," but we also prefer to put a little oil on our "blister," to save any unnecessary smart; and we are not prepared to acquiesce altogether in his quotation, that

> "In tracing human story we shall find
> The cruel more successful than the kind;"

for, as far as our experience goes, it takes "easy blows" to accomplish the greatest good.

To sum all up, our southern brother is giving all who don't fit his bedstead, allopathic doses of literary cantharides, which cannot fail to start the cuticle, whatever may be the curative effect.

MONEY is necessary to carry on all undertakings. The subscription price of our Journal is put at the lowest possible rate, and should be promptly paid *in advance;* but we are now on the last half of this year, and many of our subscribers have as yet retained *our dollar* in their pockets. We hope they will pass it over to us without delay; "then shall our empty pockets begin to thrive," and we have wherewith to pay the printer.

REMOVAL. We learn that Dr. GEO. W. GARLAND, whose article on "*Recto-Vaginal Fistula*" was published in our May number, has removed to Lawrence, Mass. While we are sorry to lose Dr. G. from our State, we can but hope that the change may be for his advantage and that of suffering humanity. We heartily recommend him to the kind consideration of our Massachusetts brethren, as possessing those qualities of head and heart so requisite in the good physician.

MEDICAL BOOKS. We would call attention to the list of medical books advertised in this number by the Messrs. WOODS, of New-York. These, as well as all other books pertaining to our profession, (new or old,) may be procured of our publisher, Mr. G. PARKER LYON, on as favorable terms as of any bookseller in the Union, and the facility of transportation from Concord by the various express routes to all parts of New-England, render it convenient for physicians who are in want of medical books, to procure them without delay, and at the lowest possible price.

PHARMACEUTICAL GLEANINGS.

Oil of Morphia.—Insolubility of Morphia in Chloroform. A few months ago, (Jan., 1854,) we published a short note in reference to oil of morphia, as described by M. St. Lager, in which chloroform was the *medium* of solution. M. Lepage (*Jour. de Pharm., April,* 1854,) refers to a previous article by himself, on the solvent powers of chloroform, in which it is stated that morphia and its salts are insoluble in that liquid, and then by new essays confirms his previous results, proving that M. St. Lager's process cannot be followed.

The sulphate and hydrochlorate of morphia being but slightly soluble in fixed oils at the ordinary temperature, but more so when hot, M. Lepage recommends that the mixture of almond oil and hydrochlorate of morphia should be heated just before it is to be used.

As a substitute for the oil of morphia, M. Souberain suggests a solution of morphia in glycerin, viz:

Acetate of Morphia,	six grains,
Glycerin, - -	a fluid ounce,

Dissolve the morphia in the glycerin with or without heat.

Mounsey's Preston Salts. The following directions for making this preparation are taken from the London Pharm. Journal, viz:

Take of True oil of cloves,	
English oil of lavander, of each -	a drachm,
Oil of Bergamot, - - - -	five drachms,
Strongest solution of ammonia, (sp. gr. 880)	one pint,

Mix these together. The bottles are then to be half filled with rough carbonate of ammonia, and filled up with the carbonate in fine powder. The salt is then saturated with the above solution, and corked closely.

Oil of Protiodide of Iron. M. Gille, of Paris, has suggested that oil of almonds may be impregnated to a certain extent with protiodide of iron, provided the iodine, iron filings and the oil are mixed together, and shaken till the odor of iodine disappears, which requires several days.

The following is the formula suggested:

Take of pure iodine, in powder, - -	34 grains,
Iron filings, - - - -	230 grains,
Oil of almonds, - - - -	25 ounces, (Troy.)

These ingredients are mixed together, and agitated occasionally for several days. The oil of protiodide of iron, when complete, has a slight amber color, no odor, and almost without taste. It preserves its physical and medicinal properties for some time without appreciable alteration, and should be kept in glass-stoppered bottles.

In the *Annals of Pharmacy,* from which we extract this notice, it is not stated whether M. Gille proved the presence of iodide of iron in the oil. It is probable that some reaction occurs between the oil and iodine, prior to or coincident with its action on the iron.

Remedy for Tooth-ache. Dr. Whipple (*American Jour. of Dental Science,*) recommends oil of turpentine as a remedy for tooth-ache, applied on a pellet of cotton, and covered with dry cotton. It is particularly applicable in cases where the pain results from inflammation of the nerve, or from irritation caused by wounding the pulp.

Cannabis Indica. The curious effects attributed to the extract and other preparations of the *Cannabis Indica,* as used in Egypt, has induced the "Societé Medico Pratique de Paris" to offer a prize of one thousand francs for the best analysis of the Cannabis. The applicants for the prize are expected to send specimens of the principles they obtain, with a written memoir descriptive of the processes, &c., which must be in the French or Italian languages, and addressed to "M. Soubeiran, Secretaire General de la Societé de Pharmacie de Paris, Rue de l'Arbaleté 21," before the 1st of July, 1854.—*Boston Med. and Surg. Jour.*

Oleo Resin of Male Fern. According to the *Monthly Journal,* Professor Christison has directed attention to the ethereal oleo-resinous extract of male fern in the treatment of tape worm. Subsequently it had been tried by himself and others in twenty cases, and in no case did it fail after a single dose to discharge the worm, and usually in one mass. The operation of the medicine, in most cases, was not attended with pain or uneasiness.

The dose varied from 18 to 24 grains; the latter has proved most effectual.

Saccharated Iodide of Iron. The Hanover Pharmacopœia gives a formula for this preparation. Sixteen parts of iodine, four of iron filings, and sixty-two of water, are gently heated together till the solution becomes green, when it is rapidly filtered, and mixed with forty-eight parts of pulverized sugar of milk. This mixture is then to be evaporated by means of a water bath, until it acquires a thoroughly dry consistence. Thirty-two parts of sugar of milk are then to be added, and the whole rubbed in a mortar into a fine powder. When properly made, it is a yellowish white powder, soluble in seven parts of water, and requires to be kept in closely stopped bottles. This powder contains rather less than one per cent. of iodide of iron.

Coating Pills. In the January number of this Journal a process was given, as suggested by M. Calloud, for coating pills with mucilage of flaxseed and sugar. The same writer in the *Jour. de Chimie Médicale* for May, 1854, suggests a new material as preferable to flaxseed and sugar:

Take of Tragacanth, in pieces, - - - -	50	parts,
Distilled water, - - - - -	100	"
Pure sugar of milk, in powder, - -	1000	"

Make a mucilage with the tragacanth and water, squeeze it through a linen cloth as in making lozenges, mix it with the sugar of milk to form a paste, spread this on plates, dry it in a stove and pulverize it. The pills are coated by moistening their surface with water and immediately rolling them in the powder. The moisture fixes a portion of the powder on their surface, and forms a coating.

Ioduretted Oil. Some time since, M. Deschamps proposed an induretted oil, as a substitute for cod liver oil, which was made by dissolving iodine in almond oil, and passing steam through the solution until it became decolorized. M. Berthé, pharmacien of Paris, suggests that when so made the oil acquires a disagreeable rancid taste, and is liable to become black by standing, and proposes the following as a substitute: Triturate 75 grains of iodine with thirty-two ounces of the oil of almonds, heat the mixture in a water bath until it becomes free from color, and does not affect damp starch paper. It is not acid, but becomes so from moisture. M. Berthé considers it superior to all ioduretted oils known, on account of its less disagreeable taste and easy preparation. It does not contain all the iodine employed in its preparation. It is considered preferable to operate in open vessels, as the oil made in close vessels becomes dark by keeping.

The dose is about the same as that of cod liver oil. M. Berthé has also prepared an *iodophosphuretted oil,* and M. Renault an *ioduretted albumen,* but doubts have been expressed in regard to their usefulness as medicinal agents. For further particulars relative to all these compounds, see the "Dublin Quarterly Journal of Medicine," and Bulletin Général de Therapeutique."

Means of removing the rancid odor of Fats. Dr. Griseler has accidentally made the observation, that an addition of nitric ether to rancid oil entirely destroys the disagreeable smell, and that when the oil is heated to separate the alcohol, it becomes clear and bright, even when it was before turbid. Dr. Griseler says, that a few drops of this liquid will prevent sweet fixed oils from becoming rancid.—*American Journal of Pharmacy.*

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THE

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[For the N. H. Journal of Medicine.]

ERGOT AND GALVANISM AS ECBOLICS.

MR. EDITOR:

I notice in your Journal for July, on page 195, an extract advocating the use of Galvanism as a substitute for Ergot as an *Ecbolic.* This term is objectionable — its definition being a medicine which will cause abortion — and any one who administers ergot for *that* purpose will be likely to fail. Many females have informed me that they have taken it for that purpose without effect; nor have I ever known it to succeed, neither have I ever known it to *originate* contractions of the uterus. After natural labor has commenced, it will usually accelerate the contractions and facilitate delivery.

In protracted labors it has succeeded well in my hands, having used it in many cases for forty years. When used, I anticipate an increase of uterine pains in twenty minutes. In some few cases no effect is perceived; in still fewer cases I have thought it detrimental.

The administration of ergot at the proper time, and in suitable doses, I consider safe, judicious, and usually effectual practice. The os uteri should be dilated to a certain extent, and the parts immediately concerned in a relaxed condition, so as to endure the forced distension without danger of laceration.

I use the ergot combined with valernian or some other article, to cover its taste. The proper quantity is ʒiss to ʒij to one gill of boiling water: take one half, and if no effect is perceived in twenty minutes, take the remainder—but do not increase the quantity if this proves ineffectual. In case of rigidity of the parts, I administer a pill of extract of stramonium, which is effectual to produce muscular relaxation.

When ergot fails to produce the desired effect, I administer tr. lobelia in half teaspoonful doses, with a stimulant every twenty minutes, as an excitement of uterine pains. I have used the lobelia frequently in lingering cases with satisfactory results: it has a relaxing power in an eminent degree; is useful and safe in protracted labors; and if it acts as an emetic, no harm need be apprehended.

It has been frequently urged by the ladies that ergot causes the death of the child. I consider it *not guilty* of such an act. It is usually administered in protracted labors, when the head of the child has been engaged in the pelvis for a long time, and perhaps dead before the medicine is administered.

Case 1*st.* Was called May 12th, 1831, to visit Mrs. C., in labor with her fourth child, (or children, for she had twins,) after she had suffered from lingering ineffectual pains for forty-eight hours. I prepared the ergot: its use was strenuously opposed by the female attendants, who urged the above mentioned objections. It being necessary for me to be absent for two hours, I first obtained the consent of the patient and her husband to the use of the ergot, if no advance had been made on my return.

On returning, and finding the same condition, I administered it in decoction with valerian. In something like twenty minutes, the patient (being in a chair) cried '*help me.*' We placed her on the seat, and in less than three minutes two female children were squalling in my lap, to the joy and disappointment of the ladies.

Case 2*d.* February 19th, 1837, called to Mrs. W., aged 28, in labor with her first child. Was detained all day the 20th; at evening prepared the ergot; the patient and husband consented to its use; but the female attendants were so sure that it would kill the baby, (whose prospects of life were not flattering,) that I waited another twenty-four hours. On the 21st, towards evening, the ergot was administered. In about twenty minutes, powerful uterine contractions ensued, and in one hour and a half the child was born—alive! Had it been dead, I must have had the honor of killing *the baby;* for many women, very knowing on these subjects, can and will dictate to the accoucheur; and if he does not heed them, he is sure of a castigation from the termigants. Reader, did you ever disturb one of these amazons, and receive one of their lectures? If so, you experienced a "tempest in a teapot."

It is said, "in the mouth of two or three witnesses every word shall be established;" and I could multiply these witnesses to a great extent, for I have used this remedy a long time, in very many cases, and usually with satisfactory results.

There is so much prejudice among many of the ladies, (and their notions must be seemingly regarded,) that I am in the habit of disguising the article in its exhibition

It is known to most practitioners that ergot causes tonic contractions of the uterus, hence its use is indicated in uterine hemorrhage, which seldom continues after its use. This contraction favors expulsion of the placenta, the womb contracts or *falls* up, shoves itself from the placenta, and leaves it loose in the cavity. If this contraction does not take place, the placenta continues its attachment wholly or in part, and hemorrhage follows. Except in hour-glass contractions, no difficulty is ever experienced in removing a placenta from a uterus tonically contracted. All placentas adhere to the womb in the same manner, and all the difference in their expulsion is dependant upon the contractions of the womb.

The administration of ergot in parturient practice is highly commended by European physicians as well as those of our own country. The first account of its medicinal virtues which met my eye was in the *N. Y. Medical Repository*, some forty-five years since. The book was loaned to me by Dr. Job Wilson, then of Salisbury, N. H. I asked his opinion. He discredited the account—thought it futile. It was there stated that it would cause menstruation and abortion: the last would entitle it to the appellation of *ecbolic*. I have no knowledge of its possessing such virtues.

I have never used galvanism as an excitant of uterine contractions. Have applied dry cupping over the loins and sacrum, but without visible advantage. ARIEL HUNTON.

Hyde Park, Vt., July 23d, 1854.

"THE CHANGE OF LIFE" IN WOMEN;

With remarks on the periods usually called "Critical."

BY JOSEPH PARISH, M. D.

NUMBER IV.

Sympathy between Brain and Uterus.—Uterus matures early—mind does not.—Women should welcome the "Change."—Illustration of Speculum Specialty.—Injury to the morale of the Sex.

We have said that the time comes in the history of woman, when the mind acts with mature vigor, and the generative organs decline. This sentiment is predicated on the fact, (or, if preferred,) the assumption, that there is a striking sympathy between the mind and the womb, though each may perform its functions with entire independence. They do not begin in early life to exhibit their powers at the same time, and yet go on for the score and a half of years allotted to uterine activity, in near relation to each other. When the uterus ceases to draw upon the nervous energy for support, the mind, strong in years and mature in knowledge, goes on to the more perfect development of its powers, till, in old age, the brightest gem in the circle that adorns its venerable crown is wisdom. The uterus matures early, the mind does not. One is destined to a short existence, the other to an immortal life. True, as in second childhood, or in the condition usually known as the period of dotage, there may be a perceptible failing of mental power. The vigor of earlier days may pass away, and a sad imbecility hang like a pall upon the darkened pathway of the aged matron.. But even in cases of this kind it is a question whether the power of the mind to live and enjoy, and even to progress, is lost. In the multitude of infirmities that crowd about the human form, and crush it to the earth, the mind may be buried in the wreck; but it is a good thought to think that it is only *buried* from sight—that it assumes native life again in its native clime—and that it may go on from one state of perfection to another, in accordance with its unending destiny.

As the uterus matures early, so it dies early: for when it ceases to act it begins to die. After its allotted time, it may never be renovated again. This is not an accident, but a law; not a misfortune, but a blessing. And yet the ever active mind dwells upon it, thinks it over, and imagines evil. It anticipates trouble and sorrow before it realizes them. The "critical time" comes. The subject of it has passed through the varied changes incident to a state of virginity and fruitful womanhood, and now occupies a stand-point hitherto unexperienced. She looks back, counts her many escapes from danger, her wonderful recoveries from serious disease, perhaps numbers her growing flock, and feels a just and lofty pride that she has filled her place in the social and domestic relations of life. She casts, too, a timid glance into the future that lies before her; and as she sees it gradually narrowing to a point,—it may be, in her view, distant or otherwise,—she is too apt to anticipate a gloomy pilgrimage over the untried pathway that lies before her. For the first time in her history, the flow that has hitherto returned at regular intervals, ceases without the intervention of pregnancy, or any known cause over which she has control; and for this reason alone she startles and doubts. And while she may be strong with many days, and wise with much experience, it is no marvel that, as she stands upon the narrow line which divides her life, she looks upon either side—to the past and the future—with conflicting emotions, such as no one can faithfully describe but herself. It is difficult for her to realize that for this cessation there is a natural *cause*, as there was a cause for the first appearance of the menses, or for their occasional interruption. And as her mind wanders away to the fields of fancy, she broods over unreal evils, and becomes the victim of actual disease. I would not be understood to assert that the afflictions often noticed at this period are invariably the result of a morbid mental condition; far from it; but that there are often reasons for seeking medical counsel that have their origin solely in groundless mental apprehension. If it be true that there is a perversion of feeling and temper when the menses are arrested by pregnancy, may it not be true that, when they cease to flow at all, we may witness other singular exhibitions of mental and moral feeling?

It is a curious fact, that in cases where the menses are arrested by disease, the moral and mental phenomena are not perverted, as they are when a natural cause interrupts their regular appearance. It is true, the brain may be oppressed and the countenance dejected; and there may be pain, or a sense of weight and fullness in the head, perhaps. And while all these symptoms indicate a near sympathetic relation between the brain and the uterus, they present a modification which strikingly indicates the line between organic disease, or disturbance, and the nervous, or as we have already called it, the *telegraphic* power, which maintains a relation or intercourse between the two.

In amenhorrhœa, for example, depending upon an atonic state of the system, or perhaps the result of cold or other accident, we see neither the morbid taste which is exhibited in pregnancy for strange and disgusting food, or none of the exquisite apprehensions which are constantly agitating the mind of the matron, as she approaches the last "critical period," peculiar to her sex. It will not be denied we think, by any one of experience, who has closely observed the psychical expressions of the female under the various manifestations of uterine disturbance, whether natural or morbid, that the brain maintains a nearer sympathetic relation with the generative system than any other organ of the body, with, perhaps, the exception of the stomach, which also participates largely in the disturbances induced through the nervous system. If it were not so, we might reasonably expect to find engorgement of the liver as well as of the brain, in the event of a suppression of the catamenia. We should expect our patients to refer to the hypochondriac region as often as to the cerebral, as the seat of uneasiness. And we see no reason why the contiguity of the bladder, the kidneys, or the bowels, might not render them as liable to take on sympathetic action, if it was not that the brain was ordained the guardian of that particular system of organs which refers to the *production* of intelligent beings. We must be careful not to lose sight, at this juncture, of the fact that since the womb has been an active organ, the mind, perhaps, was never more capable of exerting its powers, and the womb was never less so. Now, it may seem strange to dwell upon this fact, and yet it is considered one of importance, and is presented here thus prominently to secure the attention of the reader to the idea offered in Essay No. 1, to wit: that "woman should learn to *welcome*, rather than to fear this change;" and that it is the office of the physician at such a period "not to alarm, but to *encourage* and support" his patient. To welcome the cessation of a natural, periodical and healthy discharge may seem difficult. To believe that, from a certain time of life, it would be unnatural and unhealthy for it to continue, after at least thirty years of regular recurrence, may seem difficult. That such an entire and positive revolution should occur in the female constitution, without leaving traces of disease and causing suffering, may also seem difficult to realize. But the mind must be disciplined into the service; the woman must rise above her apprehensions, and the thoughtful physician hold up her hands and give her a cheerful, onward bidding.

The experience of the writer with this class of patients has not been inconsiderable. It has been his privilege to attend many females, of strong and cultivated intelligence, safely through this period, by the simple expedient referred to—keeping the mind, as it were, above the womb—the thoughts above disease—the hopes beyond danger; and it has been his happy lot to see many cross the line without apprehension, and hence without suffering. True, if there is disease in the system lurking there, in anticipation of laying hold of a debilitated enervated organ, upon which to expend its ravages, no mental effort can restrain its power. This we have often seen; and perhaps no physician has ever watched over the last days of a patient, writhing in the pains of cancer of the womb, and forgotten the hours of suffering in which his skill has failed to alleviate, and his sympathy been unable to soothe. But we have to do with the thousand and one ailments that are the result of morbid fear or groundless apprehension, and which it is asserted may be prevented, by bringing to bear the mental powers of the individual herself.

The brain, the guardian of the uterus; the strong, the protector of the feeble. This is the idea. Suppose the strong to be untrained. Let it be the generator and the cultivator of false and imaginary ideas, and those ideas, be they persistent or fugitive, durable or transient, will, just in proportion as they refer to, and operate upon the enfeebled and dependent organ, carry the latter in their own morbid train. Apprehensions will grow into realities, perhaps fears become the ruling power, and the unfortunate patient the slave of that power.

Let us present a case. A lady offers herself for treatment. For a few months she has menstruated irregularly. Sometimes the discharge has been abundant and sometimes scanty. Once or twice, perhaps, clotted blood has passed the vagina, and then again it has been deficient. She has had pain in the back and loins at some of her periods, and been free from it at others. The prescriber enquires about her previous habits of life, and finds that she has borne children, and has had no more than she could have expected of the common ills and sufferings of life. He finds that she is on the shady side of forty; and if he be a man who is moved by sinister motives, dishonest and extortionate, who makes a trade of his profession, and boasts of his success, he begins in this wise: "You are approaching the critical time of life; your womb is extremely irritable; it is very feeble, and you are liable to sudden and dangerous hemorrhage. If you do not allow me to prescribe for you regularly till you pass this *fearful* crisis, I cannot be responsible for the issue. All this clotted blood probably comes from some organic change in the structure of the uterus: it may be the commencement of a cancer, which I can arrest by caustic; or possibly there is a polypus, or some more dangerous foreign body in your womb, which will require to be extirpated." An hour is appointed for a visit; the speculum and the dreaded case of instruments, with all the paraphernalia incident to this species of quackery, are displayed. The womb is exposed to view. Females, who have never before seen the organ, are now quietly indulged with a sight, and erudite explanations whispered into their ears, and then their testimony secured to sustain the opinion of the *animal* who conducts the examination, that it is a "dreadful sight to behold." Syringes are now brought forth and dexterously used; and then appliances of various kinds recommended, none of which, perhaps, will do harm or good, and in the course of nature the discharge soon ceases. The patient is free from her apprehensions, and goes from neighbor to neighbor, to laud the skill of the being who has miraculously saved her from death, while he appropriates a large fee to the feeding of his self-satisfaction and false dignity.

Such is the road to fortune. Who will follow it? Many have. Cases of this kind have frequently come under the observation of the writer. But how much more judicious to say to a patient under these circumstances:— "This is the time of life to expect a change. You could not menstruate much longer without danger, because it would be unnatural. Nature is very kind; she wishes you to be healthy and happy during the remainder of your days, and you cannot be without this monthly flow ceases. If the discharge is at any time excessive, rest on your bed or couch till it moderates. Take your ordinary food regularly, and as bountifully as is your habit, being careful not to offend your digestive system, or allow the regular action of your bowels to be interrupted. If you feel any more unpleasant symptoms, consult your physician; but, as an intelligent woman, remember that this change is for your good; and do not allow meddling nurses or officious doctors to convince you to the contrary; for 'the truth is not in them,' unless it may be more charitably said, that their ignorance has called them out on a truant errand, and made them fit subjects for the wise injunction, 'Beware of presumptuous sins.'"

The speculum practice, *per se*, is unobjectionable; but the speculum *specialty*, as at present used, is a monster in the profession. A delicate, sensitive female, laid upon her back, her knees drawn up, and a valvular, or conical, or any other kind of tube, passed to the full extent of her vagina, with the light of a candle or the direct rays of the sun, brought to bear upon the tube, and concentrated in a focus upon her womb is an outrage upon her sex, and an indignity to the medical profession, unless in cases rendering it absolutely necessary. The mental and moral shock alone, produced by such a course, particularly in a young, unmarried female, is sufficient to produce a train of symptoms that may demand professional interference; and it has been often a question whether the injury done to the *morale* of the sex by such a system, has not greatly overbalanced the physical advantages resulting from the unwarranted use of the instrument.

Philadelphia, April, 1854.

NUMBER V.

The touch—Its value compared with the value of the Speculum.—Peculiarities of the first "Change."—The Cause of Menstruations.—Puberic Age.

The last paragraph of our last essay upon this subject declared the speculum, *per se,* to be objectionable, but the speculum *specialty,* as adopted by many, an outrage. It is but fair, as we have ventured this rather wholesale assertion, that we should present our views of what may be substituted for this system of *inspection.* This we shall do before we proceed to notice some of the diseases of the periods of "change;" for we are aware that the speculum has many strong advocates, and we would not be arrayed against them, or their *system* (for such we must call it,) without offering a few suggestions on the Touch. The eye, it is true, presents its claim to superiority over the finger, however delicate and sensitive may be the latter; but we claim for the touch more perhaps than our *vision*-ary friends are disposed to grant us. And as we press our claim, we ask an honest hearing.

The sense of touch has been bestowed upon us, that by it we may discover the palpable qualities of bodies, their size, consistence, &c. We cannot tell the consistence of a body without touching it. If we would know of its sensitiveness, we must touch it. The mind may quail before a glance of fire from the eye; the soul, conscious of guilt, may tremble under the gaze of accusing innocence; but the tangible form of an organized, material structure needs to be handled, that it may be measured, weighed, and accurately judged of. We have to do now with a womb supposed to be diseased. It is certain, says the prescriber, something is the matter. The woman is in bad health; and as the stomach, and liver, and kidneys, and intestines, all seem to be well, her womb must be out of sorts, and hence it must be looked at. Why so? The liver was once diseased; there was a violent, active inflammation, and did you look at the organ? No. Did you feel it? Yes. The stomach, not long ago, was the seat of an acute gastrites. Did you look at that? No. Did you feel it? Yes. The intestines were almost eaten through with ulceration, and you knew the exact spot where the process was going on. Did you see the spot? No. Did you feel it? Yes. The uterus is now supposed to be in an abnormal condition. It is thought to be so, because there is "change of life" with the patient. What is to be done? Is it necessary, right away, to procure the speculum and proceed to a visual examination? Is it even necessary to prescribe the Touch? In the majority of cases, not. You did not look at the stomach, and liver, and intestines, because you could not. The integuments that cover them were not made transparent, light would not deviate from the laws which govern it, and hence you did not see. You pressed with your finger through those integuments, and measured the boundaries of the disease as well as you could; you heard the responses of the patient, and recognized the points of pain, and could judge of their particular locality. Now, you want to *see* the uterus, though it may be very readily felt, because somebody has invented an instrument through which you may look. You have not been so indelicate as to touch; you have not with your finger measured the size of the womb, nor judged of its sensitiveness; you do not know whether it is hard or soft, and yet you must throw candle-light upon it to answer these questions, which an intelligent touch alone can answer.

You know, or think you do, what can be done with the speculum. We know, or think we do, what can be done without it. Let us compare. We may pass the finger directly in contact with the *os uteri*, without disturbing its position, and judge immediately of its *locality*. If it is too high or too low, too much anteriorly or posteriorly, we know it. What can be done more with a speculum as to position? Indeed, the rotation of the instrument and its proper adjustment may disturb the position of the organ in such manner as materially to interfere with forming a correct diagnosis. We may touch the anterior and posterior lips,—press, and ask the patient if she suffers pain, and thus judge of its *sensitiveness*. Could the eye do more? We may feel if it is *soft* or *hard*, *ulcerated* or *congested*—will the speculum answer more correctly? We want to know the *temperature* of the organ and surrounding parts. The quality in this respect is imparted to the finger. Is it to the eye? Immediately connected with the temperature is the question of *moisture*. How much secretion is there, and what its kind? Can the eye discern better than its more humble adjunct?

The *color* and *consistency* of the secretion it is important to recognize. May not this be brought to view upon the napkin, by the finger, and judged of more accurately than at the apex of the vagina, through a tube, and by an artificial light? Then, with reference to the *weight* of the organ, which is not an unimportant item in the diagnostic to be sought. Will not the sentient fibrils tell as true a story as the *nervous optics?* Who can doubt it? But we will not be so unreasonable as to assert that the speculum is a useless instrument. We believe to the contrary. While by the touch we may appreciate structural changes in the organ, measure its bulk, and judge of its consistency, the speculum may be used to observe the limits of excoriation, or whatever form of lesion may be present. At the same time, without it, we may judge with tolerable accuracy, from analogous appearances in other parts of the body. An ulcer upon the cervix uteri will not perhaps differ much from an ulcer upon the leg, and the surrounding tissues in either case may be marked by similar appearances. The treatment will be founded upon the same principles, though there may be a difference in the mode of its application. We cannot therefore admit that there is a very great variety of cases where this instrument, valuable as it may be sometimes, is really needful. Indeed, we readily conceive of some, where the use of it would be manifestly improper. They are these—In very young persons the hymen must be lacerated, (as has aften been done by *skilful* operators,) and the injury resulting from such introduction is, we venture to believe and declare, more serious, in the majority of cases, than the original complaint, if really any may have existed, for the discovery of which the speculum was used. In very old persons, or even in those of matronly age, who often think themselves the victims of uterine disorder, after the cessation of the menses, the vagina is contracted from a natural shrinking of the muscles. And from cicatrices of old injuries or diseases, there may be tough, fibrous bands stretched across its calibre, so as materially to interfere with the introduction of the instrument. Again, in cases of irritable uterus, or irritable vagina, or severe inflammation of the parts, the diseased action is very liable to be aggravated, whether it be a primary irritation or a well developed phlogosis, by the distension, and suffering consequent upon its use. We therefore denounce the première resort to the speculum as unphilosophical, unnecessary and dangerous. At the same time we admit that, as a dernière means, it may be used in many cases. The rule should be this: cultivate the touch; teach the finger to its utmost power, and remember that in doing this the mind acts more acutely, and as it acts becomes stronger and more accurate in judgment. When the finger fails to detect the difficulty, use the speculum —use it, too, of necessity, where local treatment is demanded; but use it not where it may not be imperatively necessary.

Now we ask the intelligent mind of an enlightened profession, if this view of the case is not a correct one.. We ask the moral sense of a virtuous profession, if the sanctity of woman's nature should be violated by needless exposure? We say needless, because we believe the speculum fashion may often drive its votaries to extravagances, which, if they do not now, they may soon regret. If the opinion here offered should be proved by the experience of others to be well founded, and the speculum specialty loose its hold upon the professional favor of many, the worst result that we can anticipate would be the preservation of a stricter morality, even at the expense of some scientific attainment.

Another consideration. It may be that symptoms of constitutional disturbance, in cases of uterine disorder, are too much overlooked, by a constant reference of the mind to the idea of locality in disease, and by an application of remedies alone to the organ itself. This is natural, and to a certain extent, rational. But a more extended investigation, which observes critically the whole constitution of the patient, as it displays its Biotic force in the great efferent and afferent circle, whether of nerves or of circulating tubes, embracing the organic life, from the capillary springs to the great reservoir, which drives the wheels of existence, is more likely to result in the good of the patient and the honor of science.

May we not then with fairness invite the admirers of the speculum specialty to study the constitutions of their patients, and to scatter a little of their wisdom to their finger ends, and perhaps, in the careful manipulations which they may make, healing virtue may be imparted to the subjects of their counsel, while female modesty shall be saved a shock, the tendency of which is to impair if not to paralyze its strength.

It would have been inconsistent with our object in communicating the series of essays, of which this is the fifth, to overlook the subject we are at present considering. And though it may seem irrelevant to some, we trust the views that are herein announced may meet with a candid criticism by the honest minds of our profession; and if they should be proved to be unsound, no one will be more prompt to renounce them than the writer.

Having devoted this much space to the speculum and the touch, we may now go on to consider, in order, some of the peculiarities of the various changes in female life. We shall consider the first change—that which occurs in girlhood. Reference has already been made to it, in its natural advent. It becomes us now to point out some of the abnormal symptoms that accompany its appearance, as well as to inquire into its uses, its elements, &c. This is necessary to a proper appreciation of the entire subject. Woman herself should know it. She has as much right to do so as to learn about the gastric juice in her stomach, or the bile that is secreted in her liver.

In number two of this series we spoke of the time of the menstrual appearance, of its average quantity, of the coincident growth of the entire organism, as well as of the particular organs concerned in its development. With the general idea already established in the mind, that the uterus is the source of the flow, we may now present the acknowledged theory of its cause, and proceed in course to other subjects as they may present themselves. To appreciate this properly, we must recognize a force—a *vis vitale*, as we have elsewhere called it,—acting with an energetic impulse, during every moment of existence, not only to regulate the growth of the body, but to animate it, and give it the ability to grow. As we have already shown, this force exists in all living creatures. We have presented it in the seed, the germ, the ovule, in speaking of the exhibition of life power in the development of the special organs connected with reproduction. We must introduce it here again, for the sake of applying it. Menstruation, when it occurs, is the first indication that there is the ovule, or rudiment, existing in the individual that will enable her to become a mother.

Dividing the great life force into the several departments connected with life functions, we have in the instance before us the reproductive force, of which menstruation is the sign. In its periodicity it resembles all living things. What is there in nature that is not periodical? What that does not change? Menstruation, then, proves the existence of an ovule—the ovule contains the germinating principle, and the germinating principle, when it becomes active, under circumstances favorable for development, produces; and produces from time to time, as the tree yields its fruit or the flower its bloom and fragrance, when under the control of influences designed to evolve its latent powers.

The human female exhibits this force monthly. The ovary is the instrument through which it is exhibited. It is, as we have already said, part of the life-force—that part which developes itself in the generative system, and is hence called the generative force. It begins in the ovary, because the ovary is the beginning of this particular system. Without it there could be no reproduction. Imagine then the ovary, an ovoid body containing a multitude of exceedingly minute vesicles, each one distinct in itself, but congregated *en masse.* Imagine each vesicle endowed inherently with the power of projecting its contained ovule, and this power under the dominion of the law of periodicity, which is seen in all animated nature. As the projectile force is being expended at the appointed time, all the tissues concerned in the formation of the genital system sympathize with the effort. The nerves are more sensitive; the blood-vessels, already exceedingly abundant and turgid, are aroused to greater activity, and in relieving themselves of temporary engorgement, exhibit the phenomenon of menstruation. This description is sufficiently minute to be understood by every intelligent reader, and to convey a truthful idea of the fact. It is to be understood, then, that the menstrual flow is blood. What kind of blood it is, whether arterial or venous, or a mixture of both, is a question that the wise dispute about Some deny its being blood, and call it a peculiar secretion, to be found nowhere else. Perhaps it may be. It matters not to us in our present inquiry. Women call it blood, because it looks like it, and it may suffice to consider it as such. There is high authority in favor of both sides of the question.

We are now, however, at the age of puberty. We have described in a former essay the changes in development, both mental and physical, occurring at this "critical period." If those changes do not occur, something must be wrong. It is just as unnatural for the girl not to *change* into womanhood as it is for the woman not to pass the second *crisis,* and become the matron of maturer years. The latter is dependent upon the former. Suppose there should be an interruption to the changes of puberic age, what would be its most probable appearance? Almost every mother can tell. She does not see her daughter of thirteen, more or less, running up like a wild stem of the forest, tall, thin, and tender, without anxiety. She wants to see her grow laterally—spread outwards as well as upwards. And when she sees her thus growing, slender and pale, she fears that there is some irregularity of sexual development. Perhaps the demand made by the life-force upon the blood for osseous, muscular, nerve and membrane tissue, has been so great as to deprive the reproductive force of its share of supply;

and hence, with an increase in one department, there has been a corresponding subtraction from another. Reverse this picture and the scene is reversed. How shall it be regulated? This is a simple question, which we shall attempt to answer in our next essay.—*New Jersey Med. Reporter.*

Philadelphia, June, 1854.

[TO BE CONTINUED.]

LECTURES ON FEVER.

By WILLIAM STOKES, M. D., *Regius Professor of Physic in the University of Dublin.*

LECTURE I.

It has long been my wish to deliver in this hospital a course of clinical lectures on fever. There are many reasons, as we shall presently see, why a course of this kind will be of value to you; and this institution is particularly well adapted for this branch of study, in consequence of our having fever wards attached to the general hospital. Among the many circumstances which render Dublin, in my opinion, one of the most advantageous places for medical and surgical study, is this, that here we have fever wards in connection with some of the medical and surgical hospitals. I do not know, except in Edinburgh, of the existence of a similar arrangement.

Although, in the ordinary course of our clinical lectures, we have repeatedly had occasion to refer to fever, I have never before attempted giving a distinct course upon the subject, my reason for which was that I did not feel myself competent to do so. But now, after a close attention to the fever wards of this hospital since the year 1827, I think that I have sufficiently matured my opinions on the subject of fever, to justify me in venturing to teach to a medical class the outlines of our knowledge on this subject.

In contrasting the opinions which I now hold on the subject of fever with those which I ventured to deliver when I was a much younger man, and engaged in lecturing on the practice of medicine in the school of Park street, I find that there is considerable difference between my present opinions—which have been gradually, and, as it were, imperceptibly, forming and growing—and those which I entertained so long ago. This proves the great necessity of not venturing to teach such important subjects as the nature and treatment of fever, until our judgment has been matured by a long and practical experience.

I am particularly anxious to draw the attention of the surgical student to this branch of medicine; for when we consider the enormous extent to which fever prevails over the world, and also that it is in itself a special study, we cannot help believing that the surgical student who has not learned fever, no matter how ably he may have been educated in surgery, and in the history of idiopathic diseases, has really but half learned his business. The surgical student who has not been taught fever is in this position: the doctrine of the universality, or of the extraordinary importance, whichever you will, of inflammation, has been impressed on his mind in every way in which it could be impressed; the ordinary practice in the commencement of a course of surgery being to occupy the student for many weeks with the history of inflammation. Inflammation is thus placed in the foremost rank; it is the first and great thing to which his attention is directed; and naturally, to the young mind, it appears that it is the key to all medical and all surgical knowledge. It is further impressed upon his mind by the surgical works that he reads not merely the practical works on surgery, but the systematic works; and it is still more impressed upon him by the kind of experience which he gets during a considerable part of his studies. That experience is experience obtained in a surgical ward in a surgical hospital; and it is very natural, indeed, that, under these circumstances, he shall believe in the universality and importance of inflammation. He sees in a surgical ward acute opthalmia; he sees the effects of an injury; he sees the process of reparation of a wound; he sees the process of cicatrization, and he sees little else; and having gone through his medical studies, he finds himself in this position, that he knows nothing but inflammation. In fact he has been taught only inflammation, he has seen little else but inflammation, and he *believes* in little else than inflammation. A great many students are educated in this way, and they go forth to the world ignorant of two facts in practical medicine and surgery, the importance of which cannot be overrated. The first is, the existence of an enormous number of acute and dangerous diseases which are not inflammatory; of diseases, as I said before, which are acute, which are dangerous, and still further, which are febrile. The idea has never been impressed on the mind of the student, that there may be a local disease, an acute disease, a febrile disease, a most dangerous disease, and that that disease shall be not only not inflammation, but something the very opposite of inflammation. When we consider that it is in the various forms of fever that these conditions are met with, and when we recollect the enormous extent to which fever prevails over the world, we are justified in declaring, that when we compare the inflammatory local diseases with the non-inflammatory local diseases, the former fall immeasurably short of the latter in number and importance. The other great fact, putting aside what I have now said with respect to the existence of this large class of diseases which are not only not inflammatory, but something the opposite of inflammation, is, that the student has not learned the danger of exclusive antiphlogistic treatment as a rule in the management of ordinary idiopathic inflammation. In consequence of not having to deal with those local diseases which require not the lancet, not starvation, but, on the contrary, tonics and wine, he has never become accustomed to the use of stimulants and tonics, and hence, in the management even of the ordinary inflammatory diseases, he is timid in the use of those measures, and he is too often rash in the adoption of the common rule of antiphlogistic treatment.

If we consider the origin of the doctrine which has so long prevailed in our schools of surgery and of medicine, though not to so great a degree in the schools of medicine as in those of surgery, that inflammation is the cause of so many diseases; and when we look back on the causes of the general adoption—the blind adoption, I may say—of the antiphlogistic treatment, we find that these unfortunate conditions of opinion sprang from many sources. Among the chief of these causes was the superaddition of the inflammatory doctrine to that of solidism, so that the ruling dogma of the day was the doctrine of solidism *plus* the doctrine of inflammation.

In order to get a clearer notion of this matter, let us go a little back. Before pathological anatomy became a science, it was held that a large number of diseases depended on alterations of the fluids. But when anatomy was directed to the investigation of disease, medical opinion rapidly underwent a change, and solidism succeeded to humoralism. Disease was then an alteration of the solids, the living tissues of the body. Now, I wish to impress strongly upon you that solidism, as it was then presented, soon came to mean more than its original name would imply.

For the same mode of investigation which established the frequency and variety of alterations of the solids, showing that in a large number of cases a common character prevailed, which was recognized as the result of an inflammatory action. Thus, in the early, I might even say the middle periods of pathological anatomy, solidism implied not only that disease was an alteration of structure, but that that alteration was of inflammatory origin. This paved the way for the introduction of the so-called physiological doctrine, which referred all diseases to alterations of vitality, not general, as affecting the whole system, but local; not differing by any special characters, but in degree only. A disease was then either a *plus* or a *minus* vitality in the affected organ, and its symptoms were explained by the sympathies of that organ; but, as so many diseases were attended with vascularity, deposition, and increased sensibility, it was inferred that the vast majority of local affections, indeed all important diseases, were examples of an augmented vitality in the part. This doctrine spread rapidly, and there were many reasons why it should do so. It was specious, simple, and had for its founder a man of extraordinary energy and eloquence. In this world any doctrine that has an energetic and eloquent apostle, will not want for converts, and Broussais was a man of great talent, experience, and practical knowledge. He was, however, deficient in reasoning power, and, in my opinion, he was also a very imperfect pathological anatomist. The doctrine became popular from the facility which it promised in the treatment of disease; for as the great majority of diseases were symptomatic of the *plus* vitality of some organ, we had only to discover the part in which this excessive life was seated, and to remove it, of course, by an antiphlogistic treatment.

When the investigations of this pathological anatomist and his followers were directed to the examination of fever cases, it was found, on the continent more especially, that local disease frequently existed in the gastro-intestinal tube. At once, then, the doctrine followed, that fever formed no exception to the rule; that it was symptomatic of a *plus* vitality of the gastro-intestinal tube; and you were led to believe that fever could be at once cured by leeching, by starvation, by poultices to the belly, and such means.

It is curious that there are some circumstances connected with fever which greatly tended to prop up this doctrine. We shall see, by and by, that an essential condition of fever is periodicity; that it is a disease which has a tendency to spontaneous termination at a given time. It is like a paroxysm of ague, only prolonged, as it were; this will give you the best idea of fever. This mysterious law of periodicity implies that the system has a power of curing itself; that is to say, that the diseased action will spontaneously subside. This is termed crisis. Now, it is found that there are a variety of circumstances which interfere with the operation of this extraordinary law of spontaneeus cure. One of these is the existence of a local irritation in any part of the system.

We see this remarkably exemplified in cases of ague. You will very often find, that in cases of intermitting fever, the treatment by bark will not succeed; and when you come to inquire what is the cause of this, you find that there is some local inflammation present. If you can remove that local inflammation, then the treatment by bark succeeds. Broussais appealed strongly to the following fact; that in cases of fever, after free depletion of the abdomen, the patients speedily recovered. So they did; but the nature of the fact was misinterpreted. Those patients had a local secondary disease in the intestine, which interfered with, or prevented, the operation of the law of periodicity. When you modified or removed that local disease, the law of periodicity came again into action, and the patient recovered. The fever did not subside because it was symptomatic of a disease of the intestine; but it subsided because the disease of the intestine being removed or modified, it was reduced to its normal state, as it were—to its state of simplicity—and then the law of periodicity was enabled to act. This doctrine was received extensively on the continent, extensively in America, and in England and Ireland; but not so extensively in the schools of the two latter countries. There was a much greater reluctance to the reception of the physiological doctrine in this country and in England than on the continent or in America, and this is highly creditable to the British and Irish medical mind. Many reasons might be adduced to explain why this was so, but we shall not enter at length into them. I may, however, observe, that English medicine had received a great degree of excellence from the writings of Fothergill, Sydenham, Haygarth, and other men of that order. Those great medical observers had, unknowingly, taught the true medical philosophy. They had taught a rational eclecticism, and hence they implanted in the minds of British medical investigators great reserve and great caution in the reception of new doctrines. Still, however, upon the younger members of the profession the doctrine had a wonderful influence. A large number of the junior members of the medical and surgical profession in this country, during the last quarter of a century, or perhaps the last half century, were strongly imbued with this doctrine, and went forth to practice over the world, influenced by this theory of inflammation being the sole cause of diseases, and believing that the whole practice of medicine was reduced to the removal of local inflammation. Another cause, however, I cannot help noticing here. About this time, owing to the unhappy and calamitous division of the profession into medicine and surgery, arose those corporate distinctions that have done so much to retard the progress of science in these countries; exclusive schools of surgery sprang up, and consequently, as I observed at the commencement, a large and increasing number of young men were educated without having ever seen a case of fever. They were educated in a surgical ward, and were sent forth naturally advocates of inflammation, because they had seen nothing else. They had seen nothing but inflammation; they had been taught nothing but inflammation; they knew nothing but inflammation; and thus, ill-prepared, they went forth to combat fever,—that disease which numbers more victims than any other,—over the wide dominions of the British crown, in America, in the West-Indies, in Asia, in Africa. These men in hundreds, I may say thousands, went out ignorant of the fearful enemy they had to encounter, and trusting in the teachings which compared the ordinary phenomena of opthalmia or those of the healing of an incised wound, or those of the cicatrization of an ulcer, with the symptoms of that terrific group of diseases which embraces the plague, the yellow fever, the bilious remittent, the malignant ague, and the typhus fever. There is nothing more difficult, gentlemen, than for a man who has been educated in a particular doctrine to free himself from it, even though he has found it to be wrong. There is something in the human mind which renders the reception of a doctrine, if it be a bad one, a most dangerous circumstance. It is like the imbibition of particular poison or miasma. We find that some men who have been once exposed to the miasmata which induce intermitting fever, will, for the whole course of their lives, be incapable of getting rid of that poison which has been once received. And thus it is, not only with the material but with the immaterial world. Thus it is, not only with the physical but with moral or intellectual impressions.

There is nothing more difficult than to unlearn. This fastening of false doctrine in the mind is one cause; but there are other causes too. The indolence of many men will prevent them taking the trouble to unlearn. The pride of many men has the same effect; and, above all things, there is this, that a very large number of students, not only of surgery, but of medicine, although they were taught the technicalities of the profession, the alphabet of their profession as it were, were not taught what is infinitely more important, namely, how to teach themselves. Now, this is the principal, and ought to be the grand object of every teacher of medicine. I believe that no man can be fully and entirely taught anything. He must teach himself. And what the teacher has to do, and what I have ever set before myself as my highest duty, is to endeavor to teach you how to teach yourselves.

We can easily anticipate what the result of this must have been; and I believe I am not saying too much, when I declare, that a large portion of the fearful mortality to which our gallant army has been subjected in the colonial service, has been owing to the circumstances to which I now draw your attention,—the fact of the medical officers going out with erroneous doctrine fastened in their minds. This name of inflammation is a most unfortunate one. It is a great misfortune that the term was given to the process in question. It gives you the idea of a fire which must be quenched by its opposite, water; it gives you the idea of a heat which must be quenched by its opposite, cold; it gives you an idea of vascularity—fulness of the blood-vessels—which must be met by measures which will empty those vessels. It gives you the idea of a fever, an excitement, which is not only to be met by abstinence, by starvation, or, as the French term it, by *diète absolue*, which means no diet at all. The fact is, gentlemen, that the formula of *contraria contrariis* as but little title to respect in legitimate medicine as that of *similia similibus* in quackery. Both are false; and I really believe that any exclusive application of either formula is both ignorant and mischievous in the highest degree. The next great error was, that although the surgical student had plenty of opportunities of seeing symptomatic fever, he had no opportunity of seeing the essential fever, and he naturally confounded the two together. And hence, here and abroad, for many years the abuse of the antiphlogistic treatment was carried to an extent which it is frightful to contemplate. Conditions of the system which required wine, bark, stimulants, careful nutrition, were met by the lancet, by leeches, and by starvation. I remember when I was a student of the old Meath hospital, there was hardly a morning that some twenty or thirty unfortunate creatures were not phlebotomised largely. The floor wss running with blood; it was dangerous to cross the prescribing hall for fear of slipping. Patients were seen wallowing in their own blood, like leeches after a salt emetic; and these disgraceful scenes continued to be witnessed for many years. The terrible symptoms of typhus fever were met by opening the temporal artery, or by a large application of leeches to the head; and over and over again it happened, that the patient died while the leeches were upon his temple — died as surely, and almost as suddenly, as if shot through the head. An eminent apothecary in this city assured me, that when he was serving his apprenticeship, there was hardly a week that he was not summoned to take off a large number of leeches from the dead body. This was not an uncommon thing. I mention these circumstances to show you to what an extent, even in our own country, the abuse of this doctrine has been carried. It is not so now. Those who have been in the habit of attending fever hospitals in this country will bear me out when I say, that the lancet is an instrument very seldom indeed employed in our wards.

We must now pass in review the chief phenomena of fever. Let us take a fair type of it, and I am sorry to say that this country is an excellent locality for its study, and has long been so. Fever is to be looked on as a disease to which we can only give a negative character—a disease of which we can say what it is not, not exactly what it is. It is a disease which in its essence may be termed a non-anatomical disease; that it is to say, it is a disease which has no known or constant anatomical character. This is the first great point to be impressed upon your minds.

And why do we say this? Because we meet in every epidemic of fever a large number of cases in which, after the general symptoms have run through their course, in such a way as to justify the belief that they present exquisite and perfect specimens of the general disease, the patient dies, and the most skilful pathological anatomist may dissect the brain, the spinal marrow, the nerves, the pulmonary and gastro-intestinal mucous membranes, the structure of all the solid viscera—every organ you please, and find no anatomical change. I believe, then, that we may go thus far and say, that when the fatal diseases of the world are considered, the malady which destroys most men is a disease in which there is no anatomical character. You all naturally ask, "If this be so, how did the French school come to commit the extraordinary error of declaring, that in every case of fever there was an anatomical character?" The reason is simply this, that they committed a great error in medical philosophy—that of inferring the nature of a disease from the observation of its phenomena in one locality. Had Broussais and his followers studied fever in the wards of the Dublin hospitals, or had they gone abroad and examined fever in the West or the East Indies, or on the coast of Africa, we would have heard nothing of the doctrine that fever was symptomic of this or of that local disease.

We find, moreover, *that fever is a disease of periodicity*, that it runs a certain period, varying in different epidemics and different individual cases. We find, further, that it is a disease in which a double danger affects the patient. One of the dangers is, that of death from simple depression; for so far from fever being a disease of *plus* vitality, it is a disease of *minus* vitality—a general condition, if we may so speak, of *minus* vitality, which of itself is often quite sufficient to destroy life, and the patient may die, and very often does die of debility alone. The poison of fever has thus a directly depressing influence on the system. But there is another condition—and this is what I wish to draw your attention to very strongly—that, in the course of that special mode of life which we call fever, a liability exists to the production of secondary diseases. You will get a good general notion of this by considering the ordinary phenomena of a case of small-pox. The patient is taken ill; he has shivering, pain, fever, and he remains in this state for several days. And then we observe vesicles appearing on the surface, those vesicles filling with pus, afterwards drying, and then disappearing. No man will say, that a fever was symptomatic of the eruption. It is exactly the reverse; the eruption is the result of the fever. So it is in typhus. The local diseases are generated by the general. There is this difference, however, between what we term continued fever and the exanthemata: that while in the latter the local disease is almost always, but not necessarily always, accompanied by certain characters, as for example, in variola there is a certain kind of eruption, in scarlatina—in measles a certain condition of the skin—it is not so with respect to the secondary diseases of typhus. Now this is a most remarkable circumstance connected with continued fever, that the secondary diseases are inconstant. They are doubly inconstant, in their seat, and in their amount; and in the same epidemic we see the greatest possible varieties in the seat and in the amount of those secondary affections. However, between the exanthemeta and typhus fever there is this point of resemblance, that the secondary affection is utterly incompetent to explain the general phenomena of the disease. So that we may say, with regard to the secondary affections in typhus fever, that they are inconstant and incompetent to explain the disease. But they are of very great importance. It may be asked, what are those secondary diseases?—are they inflammation? The present condition of medical science furnishes this answer: they are not inflammation in a vast number of cases, when you consider them in their early stage, but in many instances, after they have existed in this non-inflammatory state for a certain time, there comes on a re-active irritation, and we have then a mixed condition. This is the history of the ulcerations of the intestine. In the beginning we find tumefaction and infiltration, but without any appearance whatever of inflammation. It has been proved, that in a vast number of cases the disease goes no further, and there is retrocession of the swelling and of the infiltration, just as we see retrocession of the eruption of small-pox; but in others, the parts into which this typhod matter has been infiltrated take on a reäctive inflammation, and then we have a combination of the essential diseases and of the local disease, which is now inflammatory, though it was not so at first. We shall have abundant opportunities of proving this.

The treatment of fever is reducible to a simple formula. We cannot cure fever; no man has ever cured fever. Fever in this sense may be called incurable, because we don't know how to cure it. It is, however, curable of itself. If you leave it to its own course, it will often cure itself. The great object, then, is to preserve the patient's life from the dangers which threaten him pending the existence of his fever—of this special state of life. If you can keep him alive to the fourteenth day, or the eighteenth day, or the twenty-first day, he will recover. What are the dangers that occur in these cases? One I have already pointed out to you—it is the danger of debility; the other is the danger arising from the accidental secondary affections. We cure the patient by preventing him from dying. We lead him on to that period when, by the extraordinary law of the disease, it will itself spontaneously terminate. We prevent him from dying of exhaustion, by food, by the use of stimulants, and by tonics. We save him from the danger which the local diseases may expose him to, by meeting them as early as we can discover them. And herein lies the whole secret of the treatment of fever—to preserve the patient, at the least expense to his constitution, up to the time when, by the natural law, the disease will spontaneously subside. —*Virginia Medical and Surgical Journal.*

Succus Taraxaci Paratus. The preparations of Taraxacum, or *dandelion* root, have within a few years past attracted considerable attention from the medical profession, and have been an object of experiment from skilful pharmaceutists both in England and the United States. The hurtful effect exercised by heat in evaporating solutions of the soluble matter of dandelion, has long been noted, and many recollect the molasses-like extract which formerly was too commonly seen, unmarked by any distinct, sensible property of the recent root. The application of spontaneous and vacuum operation in making the solid extract, demonstrated this beyond cavil, and in the last U. S. Pharmacopœia, directions were given for this precaution, as well as in regard to the period of collecting the root. The *Liquor Taraxaci* (fluid extract) described by Mr. Redwood in Gray's Supplement, is prepared by macerating four pounds of the recently dried root in sufficient cold water for twenty-four hours, expressing, and evaporating to thirty-six fluid ounces, to which liquid twelve fluid ounces of alcohol is added; hence each fluid ounce of the preparation represents a troy ounce of the *dried* root. The dried root of the dandelion is more easily extracted than when it is recent, owing to the glutinous character of the juices and the difficulty of effectually disintegrating the tissue of the root, so as to completely reach the contained matter by menstrua; yet it is more than probable that the evaporation of the aqueous solution to the proper degree of concentration, not to speak of the effect of the process of drying the root in the first place, injures the product. This is partially avoided by a process published in the 20th volume, page 86, of the Journal of Pharmacy, the *recent root* being employed, and the resulting preparation representing about twice its weight of the fresh root. In the preparation about to be described, the virtues of the root, be they what they may, are preserved unimpaired, as no heat is employed in the process; the natural juice of the plant being merely admixed with alcohol to preserve it from change. Take of fresh Dandelion Roots (collected in September or October) twenty pounds, (*av.*) Alcohol, 835, sp. gr. four pints. Slice the roots transversely in short sections, and by means of a mill or mortar and pestle reduce them to a pulpy mass; then add the alcohol and mix them thoroughly.

The mixture thus far prepared at the season when the root is proper for collection, may be set aside in suitable vessels; stone-ware jars are appropriate; and extracted as the preparation is needed through the other seasons. After having stood a week, or until a convenient time, the pulpy mass is subjected to powerful pressure, until as much as possible of the fluid is removed. This is then filtered and bottled for use. It is necessary that sufficient time should elapse after the pulp is set aside for the alcohol to penetrate the fibrous particles and commingle with the natural juices, as well as for the woody structure of the root to lose its elasticity, that it may yield the juice more completely on pressure. When the pulp has stood six months in this manner it yields the juice with great readiness, and is possessed of the sensible properties of dandelion in a marked degree. When eight pounds, avoirdupois, of the root is thus treated, after standing several months, the practical result is about six pints of fluid, with an ordinary screw-press. This yield will vary in amount with the condition of the root when collected, and the length of time it is exposed afterwards, as well as the power of the press used. Should the alcohol in this preparation be contra-indicated, it might be partially removed by exposure in a water bath until the juice was reduced to five sixths of its bulk, and then for every pint of the residue eight ounces Troy of sugar may be added and dissolved in it.—*American Journal of Pharmacy.*

NOTE ON CUCUMBER OINTMENT. Several years ago, (April, 1847,) Mr. Procter published in this Journal a note on the preparation of Cucumber Ointment, since when it has gradually come more into use as an emollient application to irritated parts of the skin. It may not be improper to again call attention to the preparation and the mode of preparing it.

Take of Green Cucumbers, (suitable for table use,)	7 pounds,	*av.*
Lard, (the purest and whitest,) . .	24 ounces	"
Veal suet, (selected,) . . .	15 ounces	"

The unpared cucumbers, after being washed, are reduced to a pulp by grating, and the juice expressed and strained. The suet is cut into small pieces, and heated over a salt water bath until the fat is fused out from the membranes; the lard is then added, and when liquefied is strained through muslin into a wide-mouthed earthen vessel, capable of holding a gallon, and stirred until it commences to thicken, when one third of the cucumber juice is added, and beaten with the ointment by means of a wooden spatula until its odor has been almost wholly extracted. The part that separates by standing is decanted, and the other two thirds consecutively incorporated and decanted in the same manner. The jar is then closed, covered, and placed in a water bath until the fatty matter entirely separates from the exhausted juice. The green albuminous coagulum which floats on the surface is then skimmed off, and the jar put aside in a cool place that the ointment may solidify. The crude ointment is then separated from the watery liquid on which it floats, melted, and strained; a part into a jar and closely sealed for keeping, the remainder into a mortar, and triturated with a little rosewater until it is very white and creamy, for present use. It is usual to keep this ointment in glass jars covered with rosewater, to prevent access of the air.—*American Journal of Pharmacy.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, SEPTEMBER, 1854.

Acquittal of Prof. Crosby. Most of our readers have already learned that, on the second trial of the suit brought by Lorenzo Slack, of Norwich, Vt., against Dixi Crosby, M. D., of Hanover, in this State, for alleged maltreatment of a fractured thigh, the jury of Windsor Co. (Vt.) court has rendered a verdict in favor of Dr. C., thereby reversing the decision of last year, which assessed damages to be paid by him to said Slack to the amount of $800,00 and costs.

The result of this trial has been anxiously looked for; and it has been very justly regarded as involving the interests of the whole profession to a greater extent than any previous trial in this country.

It was of importance, as establishing a precedent upon several new and heretofore untried points. It was the trial of an eminent surgeon,—a professor in a medical school of established reputation,—the representative of a class of surgeons heretofore comparatively free from these prosecutions. It was also the trial of a surgeon whose connection with the case was very little more than that of a mere spectator. More important, still, here was a patient who had wilfully disregarded the most important directions of his attending physician,—claiming compensation for the consequences of his own indiscretions, so that on this case depended many points of vital importance, not only to surgeons, but to the whole community.

When Dr. Crosby was sentenced to pay damages, at the trial in May, 1853, a sensation of alarm and insecurity pervaded the whole medical fraternity, and we are informed that forty prosecutions would have been immediately commenced in Vermont, and many in this State, as a consequence of a like verdict in the present trial.

We consider Prof. Crosby entitled to the regards of the profession for the energy and perseverance with which he has defended himself,—as, while he has protected his own pocket and reputation, he has in a greater degree protected the pockets of his professional brethren.

INSTITUTIONS FOR THE INSANE IN PRUSSIA, AUSTRIA, AND GERMANY. BY PLINY EARLE, M. D., &c. *New-York: Published by S. S. & W. Wood, pp.* 245. The accomplished author of this work visited various institutions for the insane in these countries, (seventeen in number,) in the summer of 1849, and we have here a succinct account of what he saw worthy of notice in each establishment, including architectural merits and deficiencies in the structures appropriated to this purpose; the physical, medical, and moral treatment of the inmates; and being the observations of one well qualified by education and experience to see clearly and compare the advantages of the several institutions, this description contains a mass of facts which are invaluable to every one who has any connection with the care of the insane; and no one who wishes to do his whole duty to those insane persons who may come under his care, will neglect to procure and read this book, in which is embodied much valuable information in relation to forty other institutions in the same countries.

AN EXAMINATION OF THE PRACTICE OF BLOOD-LETTING IN MENTAL DISORDERS. BY PLINY EARLE, M. D., &c. *New-York: S. S. & W. Wood, pp.* 126. "To *bleed*, or not to *bleed*: that's the question," are the first words of this essay, and the whys and the wherefores,—the arguments *pro* and *con*,—the authorities for and against the practice of bleeding insane patients are here arrayed in a way to bring the whole case fairly before the man who wishes to know the whole story, and when, if ever, he is justified in prescribing blood-letting in insanity.

There is no higher authority in this speciality in this country than Pliny Earle, and his present contribution cannot be otherwise than popular.

As it is in the acute or first stage of insanity that blood-letting is more commonly prescribed, and as this is the stage of the disease where they most frequently come under the care of the general practitioner, so this book is equally valuable to him who wishes to do his whole duty as a physician as to those who are specially engaged in the treatment of mental disorders.

Tully's Materia Medica. We have received Nos. 10 and 11 of this work. The frequent illness of its venerable author renders its issue irregular, but from the peculiar character of the book this is of less consequence, as subscribers are called on to pay only for what they receive. We perceive by a notice in the last No. that the publisher suffers from the negligence of subscribers in remitting their dues. It would be a melancholy commentary on the liberality and justice of our profession, if this work, national as it is in character, should be discontinued short of its completion, on account of non payment of its subscribers.

We believe physicians are proverbially "slack" in paying their debts, and especially their "debts of honor" due to periodical publishers,—at least such has been our experience, and such is the complaint of our confreres throughout the country. It is an act of petty meanness, not to say dishonesty, to withhold from a publisher his honest due, of which no high minded man should be guilty.

Ranking's Half-Yearly Abstract. No. 19 of this periodical has been received. We have heretofore called the attention of our readers to its claims, as confining itself less closely to British literature than do some others of its class.

The number before us contains upwards of 300 pages of the best contributions to medical science, for the six months from January to June, 1854, and it can be obtained by remitting one dollar to Lindsay & Blakiston, Philadelphia, who will forward the volume free of postage.

Who will contentedly remain ignorant of the advances daily made in his profession, when he can keep posted up for two dollars a year?

SHORT NOTICES OF HOSPITAL THERAPEUTICS.

To Prevent Night-sweats in Phthisis. Night perspirations in the course of phthisis are often extremely annoying to the patient; they appear, also, to be simply debilitating, and unattended by any degree of collateral benefit. Some cases which were carefully noted by Mr. Hutchinson, the clinical assistant at the city hospital for chest diseases, with a view to the determination of that question, appeared to show that they may be artificially checked, not only with impunity, but with great benefit. The patients who were so treated, and who in the course of a week or a fortnight, got quite rid of sweatings which for months had been profuse, thought themselves much better, and did not complain of increase, either as regards the expectoration, the feverishness, or the sense of stuffing in the chest. Under the usual treatment of phthisis, (full diet, cod-liver oil, and tonics,) the tendency to night-perspiration often ceases spontaneously. If it becomes desirable to expedite process, it may be done by the sesquichloride of iron, the mineral, the acids, or, best of all, by the gallic acid. The following is the prescription for a night-draught containing the latter :

℞. Acidi gallici. gr. vij. ; morph. acet. gr. $\frac{1}{8}$; alcohol q. s. (a few drops;) syr. tolutan. ʒss. ; aquœ ℥j.

The night-pill, as we find in the Pharmacopœia of Brompton Hospital for Consumption, is—

℞. Acid. gallic. gr. v. ; morph. hydrochl. gr. $\frac{1}{8}$; mist. acac. q. s. Ft. pil. ij.

It is also of advantage to adopt an astringent regimen as far as convenient. The patient should be directed to sleep on a mattrass, alone, and not heavily clothed; he should wear no flannel in bed; as dry a diet should be taken as conveniently as can be borne, and fluid should be especially avoided in the latter half of the day, none whatever being allowed later then several hours before bed-time.

Treatment of Milk Abscess. We alluded in terms of strong commendation, in a former report, to the plan of tonic medication in all cases of milk abscess, which is adopted by Mr. Paget at St. Bartholomew's Hospital. Very numerous cases of this affection, in all forms and stages, excepting perhaps the peracute, come under treatment in the outpatients' rooms of that Institution. Their subjects are generally cachectic women. Mr. Paget always opens the abscess as soon as fluctuation can be felt, by an incision as small as possible; scrupulously abstains from squeezing, and orders a small poultice to be applied over the part where the skin is inflamed. Over the poultice a layer of cotton-wool is placed, and the whole slung to the neck in a handkerchief. A draught, containing quinine and the sulphate of iron, is ordered to be taken three times daily. Mr. Paget states, that, for many years, he has never, in a single case, had any trouble with fistulæ. We observe a great difference in practice among Hospital Surgeons as to making large or small incisions into mammary abscesses, some preferring very free openings, and others, like Mr. Paget, never making more than a mere puncture. On the whole, the latter mode appears to be more successful; the constitutional treatment is doubtless, however, of the most importance.

Dilute Nitric Acid in Constitutional Syphilis. A practical rule of great value in the constitutional forms of syphilitic disease is, never to persevere with a remedy which, after a fair trial, produces no apparent benefit. It is a disease which, if the right treatment be hit upon, generally yields with surprising rapidity. Another rule, which we observe most practical surgeons adopt, is, to change the remedy, if, after great improvement, the affection come to a stand-still, or appear to retrograde. By ringing changes on the iodide of potassium, small doses of the bichloride, iodide, or biniodide of mercury, or the dilute nitric acid, much greater good may be done than by the continuous employment of any one of these preparations. The dilute nitric acid as a drug which has a considerable reputation in this disease, but of which the exact effects have not been sufficiently investigated. Whether it acts merely as a tonic or alterative, or whether it has specific power over the disease, is yet a debated question. The following case, in which, after the iodide had failed, it produced effects which might seem to denote a specific influence, is worthy of narration. We epitomize it from the daily record kept by Mr. Edmonds, the dresser of the patient.

E. J., aged 20, a prostitute, was admitted into St. Thomas's, under Mr. Simon's care, on April 26, suffering severely from an eruption of ulcerating rupia, the large sores formed by which were scattered over the thighs, nates, and some other parts of the body. The disease had marked syphilitic characters, and she admitted having been salivated for the original affection, one year previously. Mr. Simon ordered a meat diet, with eight ounces of wine daily; the sores to be dressed with bichloride lotion (gr. ij. ad. ℥j.,) and a draught containing four grains of iodide of potassium dissolved in water, to be taken three times daily. These measures were continued for ten days without benefit, the patient meanwhile taking her food well. On May 6, some of the sores were decidedly increasing, and one of the larger was in a very sloughy state. The draught was now changed for ℞. Acid, nitric. dilut. mxxv., syrupi ʒij., quin. disulph. gr. ii., aquæ ℥j. The same lotion was continued, the quantity of wine increased to twelve ounces, and two eggs added to the daily allowance of food. A surprising, rapid improvement ensued on this change of measures. The sores at once cleaned and commenced to heal. In the course of ten days several were almost cicatrized, and the patient is now so nearly well that she will shortly be discharged. It is possible, of course, that the quinine in this case, which was commenced simultaneously with the acid, had some share in the cure. As, however, a tonic regimen, with wine, had been pursued before, without the least benefit, it seems fair to attribute the chief influence to the latter.—*London Medical Times.*

Remedy for Favus. From the observation of about a dozen cases of severe favus, (diagnosis by the microscope in all,) recently treated by Mr. Startin at the Hospital for Skin Diseases, we can speak with great confidence of the efficacy of the following ointment. It is the Ung. sulph. comp. of the Pharmacopœia of that institution. ℞. Sulph. sublimati lbss.; hydrarg. amonichloride. ℥ss.; hydr. sulphureti cum sulph. ℥ss.; Leviga simul, dein adde olivæ olei ℥iv.; adipis. recentis ℥xvj.; cresorti mxx.; misce. To correct the state of general health, Mr. Startin commonly orders simultaneously a mild course of the iodide of potassium, but this, we suspect, has but a small share, if any, in the local result. Often when the scalp has been for many years thickly covered with the peculiar favus crust, four or five nightly applications of the above ointment have sufficed to make it perfectly clean. So long as the patient will continue regularly to use a small quantity every day, the disease may be prevented from reäppearing, and the condition assumed by the scalp under its influence might easily be mistaken by the inexperienced for one of complete cure. As soon, however, as the inunction is suspended, the eruption reäppears. This liability we have known, in more than one case, to extend over nearly a year, and probably it may for much longer periods. The ointment, however, which does not smell much, need only be applied at night, and may be washed entirely away every morning, so as to entail but little inconvenience on the patient. The hair will, to a considerable extent, grow during the treatment, provided that the scalp have not been too much destroyed. It is a most disgusting disease, for which as yet no real cure is known. It is much to be in possession of an almost certain means of ensuring its absence. The ointment no doubt acts as a parasiticide. Before its first application it is desirable to clear away the crust as much as possible, either by fermentation or a poultice.

We may remark, that the ointment mentioned is used by Mr. Startin in the treatment of scabies, and also in that of the contagious form of porrigo.

Death from drinking Cold Water. Dr. Dickson, of Charleston, S. C., says: "I have never seen a death from drinking cold water, nor have I been able to obtain any authentic account of such an event having occurred since I have been engaged in the practice of medicine in this city. Yet here, if any where, such accidents should occur. Immense quantities of ice and ice fluids are daily consumed here by persons subjected to the several conditions which are regarded as calculated to favor the morbid influence of the agent in the highest degree. The cases described by Rush I believe to have been generally cases of insolation, and that, being sensible of rapidly approaching disease, and at the same time feeling an internal heat, the patients were just procuring relief when overtaken by sudden death."

Radical cure of Inguinal Hernia. On the 28th of last March, M. Jobert, (de Lamballe,) presented a patient to the Academy of Medicine, in whom he had produced a radical cure of inguinal hernia, by puncturing the sac and injecting iodine, which, by occasioning adhesive inflammation, had caused permanent obliteration of the sac.—*Medical News.*

THE
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"THE CHANGE OF LIFE" IN WOMEN;

With remarks on the periods usually called "Critical."

BY JOSEPH PARISH, M. D.

NUMBER VI.

How long is the Puberic Period? Emansio Mensium, its Hygienic and Moral Treatment. False views of medication. True Therapeutics.

Before answering the question at the close of our last essay, we wish to present a few suggestions on the puberic age. The civil law fixes the age of puberty in females at twelve years; and while it may be well to erect a legal standard, it will not be safe to adopt the same rule in viewing the subject in the light of science. The menses may appear at twelve years, and often do, and if the report of carefully prepared statistics, was to make it the average period, still it is important to appreciate the fact, that when the womb menstruates for the first time, though it may be capable of conception, its powers in this regard ought not to be employed. The change coincident with this period, already described, though sudden in its appearance, is not a change of a day but of years. The mind and the body take a long time to complete their development, and if we should be allowed to limit the puberic age, we should establish its boundaries between the time when the menstrual effort first commences, and the individual assumes the full size of womanhood, and the judgment and will, and all the faculties of the mind are being fairly manifested;—in other words, till she is marriageable; for a woman is not marriageable simply because her womb exhibits in her monthly appearance the procreative power. She is a moral and social being, and is not capable of assuming such a sacred relation till her moral and social properties and habits are in good culture, and well grown. When she menstruates, she exhibits merely the evidence of her generative force; but she must afford testimony of that force being in its full and regular development. The uterine structures must perform their first duties well, before they can be entrusted with the more important office of conceiving and bearing a living being. Years must be spent in this discipline, while the mental and moral powers are being cultivated, to adorn domestic life; that as the physical forms and matures, the intellectual may be prepared to educate and magnify the immortal part. She may be physically a woman at thirteen or fourteen, but she is not socially a woman, and hence is not marriageable, till in manner and mind she becomes what none but a woman can be. The puberic age, then, according to this estimate, covers several years of life;—the most interesting period of existence; and it is when irregularity is manifested, that the health suffers. Now for the question—How shall the organism be regulated?

In our last essay that species of irregularity that is marked by a non-appearance of the menstrual flow was referred to. The osseous, nervous, and other deposits, were supposed to be furnished at the expense of the blood, and particularly of that portion of it required by the generative function. At the puberic age, when the uterus is suddenly aroused to action, the whole nervous system becomes excitable, and its powers are loaned in aid of the efforts at menstruation. This condition is known by the term, *Emansio Mensium*,—signifying that the menses are "stayed." Such accident may be the result of congenital deformity or monstrosity; some part of the genitalia may be wanting, or not sufficiently developed. These cases we do not propose now to consider: but only such as occur with a full development of the generative organs. In such, there is defective growth, not of the organic structure, but defective power in the nervous system, or impure blood finding its way through enfeebled vessels. Contemplate a young lady in this condition. The ovaries, and uterus, and all the suite of genitalia are there; the ovaric arteries, with those that supply the sciatic and hypogastric regions, and the nerves of the same names and places, all are active and tense, with the excitement incident to the period: but the flow does not come. The nerves and vessels, stimulated unduly, feel the re-action consequent upon unsuccessful, though protracted labor; and the system elsewhere responds with painful monitions to the generative effort. The defect is in the want of supply, and may be said to be dependent in most cases upon improper mental and physical training. When no congenital deformity exists, the rich air of the atmosphere, given to oxygenate the blood, has perhaps been excluded from the lungs—the physical exercise that is needed to make the muscles grow—the cheerful and wholesome delights of true domestic life,—have been neglected, and the nervous system strained by artificial enjoyments, which, while they have consumed a taste for the real and good, have substituted a morbid fancy for things false and unsatisfying, and the whole economy has become the victim of indulgence, while the parent, who should have been the regulator, is the sad mourner over the broken vessel it was her delight to adorn with the trappings and imagery, of a defective social system.

The family physician is consulted, and he finds perhaps a sallow complexion, irregular dejections from the bowels, loss of appetite, general lassitude, &c., with pains in the back, and a variety of symptoms indicative of general disorder. If he be an *unwise* physician, he will probably at first attribute this state of things to the non-appearance of the menses, and medicate with some of the variety of remedies known as emmenagogues. It is natural for him, however, to think that he must first prepare the alimentary organs for their proper action, and he judges that the biliary secretion must be altered by calomel; the renal product increased by diuretics; the action of the bowels stimulated by gentle cathartics; and the tone of the stomach improved by tonics, while the dry and rough surface must be made moist and smooth, by an occasional sweating. The result of all this will be the taxation of the Doctor's power and skill, in the cure of symptons, aggravated and complicated by his own prescriptions, and of the patient's vital forces in the resistance of oppressive treatment on the one hand, and a debilitated organism on the other. If the physician be a *wise* one, he will judge that the non-appearance of the menses, instead of being the cause is the consequence of the constitutional debility. Instead of the alterative treatment, to *prepare* the system, and then the emmenagogue treatment to produce the menses, he will adopt a different plan. His meditations and conclusions will be somewhat as follow. My patient is pale and thin; her pulse is feeble, and easily excited; her skin is dry and chlorotic; her appetite various, and her bowels irregular. Her *morale* is defective; the temper is irritable; the natural energy of her early youth has given place to habits of indulgence and ease; not of body only, but the mental and moral faculties have been allowed to run in an unhealthy channel. Why all this? She is pale, because her blood is pale; and the red corpuscles are deficient, because the pure air has not been breathed into her lungs, for she has thought herself too delicate to go out and inhale it. Her blood is thin, because her food has been defective; she has been too dainty to eat blood material. Her pulse is feeble, because her heart is; and her heart is so, because the blood is not strong enough to make *it* strong. It is easily excited, because her circulation is weak; for if you tax a feeble organ or a community of organs beyond their strength, excitability is their answer of resistance. Her skin is dry and lurid—her bowels and appetite varied, for the same reason. Her temper is irritable, because she has given up to be delicate, and tender, and useless; and her brain partakes of the same morbid influence. She does not menstruate, because she neither has the material to supply, nor the power to produce, and yet all the productive machinery exists.

I will institute a thorough reformation in her mode of life, and let the

Materia Medica alone, at least for the present. These shall be my therapeuties. Air, exercise, bathing, early rising, and early lying down, plain nutritious food, cheerful and wholesome enjoyment. Because she is pale and thin, I will give her fresh air, sunshine and blood-making food; for these contain the elements of health and vigor. Because she is irritable and self-indulgent, I will send her forth to the study of nature, upon her fields, in her gardens, and under the shade of her forests; for I know that kind nature spreads out her beauties to attract and delight the eye; she invites to exercise, to develop the muscles; and she opens a store-house of wonders, to employ and energize the mind. Then for the defective *morale* of my patient, I will make her a messenger of Christian charities to the poor, and as she distributes them her own heart will enlarge, and almost unconsciously to herself she will lose her taste for the follies and forgeries of life, as it is lived in the circles of fashion and ease, and find herself a woman, disciplined, and matured, in body and mind, for the beginning of life's battle.

How much better this than calomel to cure the liver, and aloes to purge the bowels, and tansey to force the womb! In the one case you develop the being and perfect all the secretions by the obedience of natural law with which science agrees; in the other you produce effects over which both nature and science weep tears of shame and bitter reproach.

Though it may take months and even years to accomplish the work, it is, nevertheless, to be done before the patient can be what she ought to be.—The time that it takes is the period of puberic age. Infancy has its term of years, and its crises. Childhood has its limits, and its peculiar diseases and necessities. Puberty has likewise its probationary, or its forming stage, and out of this it grows progressively, till the dawn of womanhood breaks upon its decline, and lights the way to sterner life. Hence we esteem it a false doctrine that limits the puberic age to a positive period. It would be safer, as already intimated, to fix its term within certain boundaries—as between the beginning of menstruation, and an age at which the individual may be considered marriageable.

According to this theory, then, several years are embraced within the term of puberty, and it may have assigned to it proper divisions and variations. Mothers are frequently alarmed at the appearance of the flux at twelve years; and are disposed to attribute it to an unhealthy precocity in their children. So it may be; but oftener it is not. Here is the rule by which to determine: If the general system consents, if the constitution of the *infant woman* is unimpaired by the appearance, it is not precocity. If the muscles have been so trained, and the blood so supplied, and the lungs so active, as to induce a rapid growth in the general system, and the uterine organs catch the stimuli which are spreading out the body and invigorating the entire creature, then they are not precocious in offering the mensual supply, because they are only responding to the native functional power which has roused up the whole being to sudden growth and completeness. If, on the other hand, with the monthly show at so early an age, there should be a decline of general health; if the muscles should shrink, the blood be slowly made, and the lungs fail to purify it, then the appearance would constitute an alarming precocity. In such cases, because the womb may waste much of the common supply, it should be kept in perfect repose by position, and by efforts to repress excited local action, while the flagging and indolent members of the body should be aroused to increased functional activity, that a harmony and unity of purpose may be enforced and sustained.

So there may be on the other hand *tardy* menstruation. The menses may not appear at their wonted time, and the general development progress without the marks of disorder. In such cases there seems no need for interference, while the general health continues unimpaired. The flow is retained, perhaps on account of a little tardiness in the growth of the uterine organs, or of inactivity of function. In either case the indications for treatment would be manifested by some general disorder or local disturbance. Without these there is but little if any danger.

Let us sum up, then, our ideas upon this subject, as follows. The term of puberty may be characterized by precocious menstruation, or an early appearance without precocity; by tardy menstruation without unnatural symptoms, or by failure of the menses with the symptoms of emansio mensium. In all, the uterine organs are subsidiary to the rest. Their apparent diseases do not exist, unless there is deficiency in other parts, and they are relieved as the general system approaches a healthy standard.—*N. J. Med. Reporter.*

Philadelphia, August, 1854.

[TO BE CONTINUED.]

LECTURES ON FEVER.

By William Stokes, M. D., *Regius Professor of Physic in the University of Dublin.*

LECTURE II.

I stated in the Introductory Lecture that since the period when I lectured on fever, as one of the subjects embraced in a systematic course, my views on that disease had been altered. In order to prevent misconception, it is necessary that we should return to this point.

By refering to the American edition of my lectures on the Practice of Medicine, published in 1837, it will be seen that I had insisted on the doctrine of essentiality, and that I combated those views of the Continental pathologist which referred fever to a local and an inflammatory cause. On these great points, no change has taken place in my opinion. I do not claim any credit for the doctrines I then taught and still believe, for they were then held by most British physicians; and I am glad to observe that the state of opinion on the Continent on these questions is fast approaching to that which has been so long held in these countries. The frequency and importance of the local lesions were maintained by me in 1835, and to this doctrine in general we still adhere.

In what respect, then, you will ask, have my opinions altered? I answer, that it is in the view we should take of the relation which inflammatory action has to the local diseases in fever; and, again, as to the amount of influence which these local affections may be supposed to possess, in indicating a fatal termination of the malady. Although we formerly held that the local alterations were secondary to the fever—that they were really symptomatic of the fever, not the fever symptomatic of them, as Broussais taught—yet we did not sufficiently recognize the fact that in most casses of inflammatory action associated with them was itself secondary to the local lesion—that it was reactive, and, as such, had probably less pathological value than the local change which preceded it.

Again, the opinions which were then inculcated as to the influence which the local diseases had in causing a fatal result must be in at least two respects modified. I formerly was of opinion that death in fever was mainly to be attributed to the virulence or number of the local diseases. Such is not my opinion now; for although in examining the bodies of many patients who have died by fever we find various local alterations, yet they are often insufficient to account for death. And we have had abundant proofs that the typhus state itself may cause death, without there being any manifest local disease in any part of the system.

In another, and seemingly opposite point of view, our opinions have been changed. For I think that so far at least as the lungs are concerned, we did not sufficiently estimate the danger produced by the local disease independent even of the re-active inflammation. To this point I shall hereafter draw your attention more fully. We too exclusively considered the local affections as inflammations, though secondary to the fever; and did not sufficiently admit them as special typhus lesions or deposits, which might occur without any inflammatory action, or precede it.

To sum up, then; whatever be the changes that may have occurred in my opinions about fever, they are rather developments of the doctrine formerly taught than its rejection, or the substitution of any essentially opposite view. In all points relating to the essentiality of fever, the influence which the law of periodicity exerts upon its phenomena, the secondary nature of its local affections, and, lastly, its contagious character, my views remain unchanged. But on those points to which I have already alluded, the alteration of our views is important as bearing on practice, inasmuch as it points more decidedly to the adoption of a treatment directed to the general more than the particular or local condition, and again to the more liberal employment of the tonic and stimulating treatment in the typhus of this country.

You will easily anticipate the general result of the views which I now attempt to teach you. They have led us to attach less importance than we did formerly to the inflammatory state in fever; that is, to the condition that indicates an antiphlogistic treatment, in the ordinary sense of the word. In the use of stimulants we have become much more bold, even under a great variety of circumstances. But I must say, that with reference to the employment of wine in large quanties, we have been drawn to this mode of treatment less from any theory than from simple and accumulating experience by which we become less and less timid in the use of stimulants. Observe here how a truth in pathological anatomy may be foreshadowed or anticipated by observing the effect of a therapeutic agent.

We considered at our last lecture the general nature of fever, and you will recollect that I impressed upon you, as the foundation of the entire subject, that, when we compare fever with a large number of the diseases catalogued in books, we find this great difference—that, while the great majority of these latter diseases have an anatomical character, fever is wanting in an anatomical character. We may, then, you will readily see, divide all diseases into three great classes.

In the first class we have diseases which have an anatomical character—diseases to which we can give an anatomical expression. I need not occupy your time in giving examples of this class of diseases.

In the next place, we have a most important class of diseases, which have no anatomical character, and yet they are not fevers. I allude to the *neuroses*, or, as they are commonly termed, nervous diseases; of these, mania, epilepsy, lock-jaw, hydrophobia, hysteria, chorea, convulsions, are familiar instances. Here we have some most remarkable disease, which have not any anatomical character; that is to say, we cannot show that they depend upon any known or ascertained anatomical change of any portion of the system, including the brain, spinal marrow, and nerves. The general character of this singular group of affections, which we call *neuroses*, shows that, whatever be the nature of the disease, the seat of it is in the nervous system; but, in the present state of anatomical knowledge, we are not justified in saying what the condition of the nervous system is to which they owe their origin, or whether it is an organic change at all. Even the results hitherto obtained by microscope have been chiefly negative; the microscope has added but little to what was before known on those subjects. I may state here, lest you should fall into a misapprehension, that I do not wish you to believe that in none of those diseases do you find organic change. The fact is, that in many of them you do; but when you come to enquire what those organic changes are, you find that they are so inconstant, so variable, frequently so similar in opposite diseases, that they altogether fail in throwing any positive light upon the subject.

This, then, is the second class of diseases; the first class having an anatomical character, the second having no anatomical character. Now, we come to the third class, which comprises fevers. Fevers, as we have already said, have no anatomical character,—then you will say, "How do they differ from the neuroses?" As far as we know, and strictly speaking, they differ very little; but, there is this feature connected with them that fever seems to be a special condition of life which is to exist for a certain time, and then to cease,—that is to say, it is under the law of periodicity; and, in this respect, the phenomena of fevers differ very much from those of the pure neuroses. There are other differences, too, between fevers and neuroses. It is quite true, that in a large number of fevers death may take place without any organic change that we can demonstrate anatomically; but it is true, on the other hand, that in a large number of cases there is a tendency to the development of what I designated in our last lecture as the secondary lesions of the disease. Thus, if we compare these two classes, the neuroses, which are not fevers, and the fevers, properly so called, we find this great difference, that among the former, as for example in hydrophobia, we do not see any tendency to the development of ulcers of the intestine; nor in epilepsy do we find any tendency to the development of bronchial diseases; nor in mania do we see a cutaneous eruption; nor in convulsions do we find any of these various organic changes produced. This tendency, then, to generate or produce local anatomical changes secondary to the fever is another remarkable distinction between this class of affections and the pure neuroses. There is a third very remarkable distinction between them. Fevers—using the term in a general sense, embracing, as I told you at our last lecture, a great number of diseases, as the exanthemata, typhus, plague and yellow fever,—are capable of being transmitted by contact or by vicinity, and a great many of them are contagious. So that in their subjection to the law of periodicity, in their liability to generate or prôduce various organic changes in different parts of the system, and in their transmissibility by contagion, we have three very impotant distinctive characters, although we cannot reduce them to an anatomical expression.

A great deal has been written on the subject of the proximate cause of fever, and theory upon theory has been promulgated on this subject. We are, however, at this moment, just as ignorant of the proximate cause of fever as we were in the time of Cullen, or even long before him. We do not know what the proximate cause of fever is; but if we look at the entire phenomena of fevers, and enquire what views we may safely hold at present, for want of a better doctrine,—for it may be that, in the progress of pathological science, the proximate cause of fever will be discovered; and it is quite possible, I might even say probable,—when, I say we deal with the expression of the actual state of our knowledge, we are justified in stating that fevers are the result of the introduction of a poison of some kind into the economy. The whole of the phenomena of poisoning by organic matters seem to point out a close analogy between fevers and those diseases in which a poison is introduced into the system. If a man who is in perfect health is exposed to the contagion of syphilis, in a short time his system becomes a laboratory for the formation of syphilitic poison, and he is capable of communicating the disease. As far as we can form a judgment in this question, we may say, that there is a very close analogy indeed between fevers and these diseases, whether they be fevers which are the result of contagion or not; and in this way we see a connecting link between fevers, which we call acute diseases, and diseases which are neither acute nor febrile. Thus, for example, we do not say that a patient who is laboring under syphilis, which he has caught by contagion, is in fever; but he is, nevertheless, under a condition, which, as far as the chemico-vital state of his body is concerned, is somewhat analogous to fever; that is to say, his system has received a poison, and having received that poison, it seems to work upon it, or the poison to work on the system, and the result is that the system becomes a generator of the same poison that it had received. Now, let us go a little farther into this subject. I might give you various other illustrations; and, indeed, I think you will find that some unexpected analogies will arise in this matter, and that you will even perceive an analogy between two such opposite diseases, —such dissimilar diseases as typhus fever and pulmonary consumption. For there can hardly be a doubt, that, under certain circumstances, tubercular matter introduced into the system acts like contagious matter, and that it produces a development of tubercular disease in the system thus infected. Such cases, then, may be considered as examples, if you will, of very chronic fevers, long-continued fevers, and fevers which are not, apparently at least, under the influence of the law of periodicity. I am perfectly persuaded that the more we study that class of diseases which seem to be general rather than local, we will find that the possibility of contagion will be more and more exhibited. I am strongly of opinion that almost all the febrile diseases are contagious—that is, essentially febrile diseases—and I think it certain that there are other diseases, also, which we do not call fevers, that are contagious. It is hardly possible to doubt the contagiousness of cholera; and we may go still further, and extend the possibility of contagiousness even to such diseases as tubercular affections, and perhaps even further.

Now, let us examine what are termed the Exanthemata, Meases, Scarlatina, and Small-pox. These diseases are, in all essential conditions, fevers. An individual in perfect health is exposed to a certain exciting cause, and he gets a general illness, which exhibits phenomena referrible to the law of periodicity. How do these diseases differ from typhus fever? They seem to differ in this, that their local phenomena are more constant, and that they are probably more uniformly contagious. The contagion of small-pox, of scarlatina, and of measles, is a recognised and established doctrine.

We know that scarlatina is generally constant in its phenomena,—that measles is constant in its phenomena,—that small-pox is constant in its phenomena, and especially in the phenomena of its secondary change,—so much so, that the secondary change is taken as a distinctive mark of the disease. These affections are probably, as I said before, more directly contagious; and this, perhaps, may arise from the circumstance that the matter of contagion, in these cases, is more elaborated,—is perhaps more perfect; and the patient who contracts the disease is very much in the same position as a person who contracts syphilis; that is to say, that an organic poison of a special kind, whose essential characters, however, are so subtile as to escape chemical investigation, has been presented to his system, and has affected him. The phenomena of continued fever are more variable; and this may arise from the want of constancy in the exciting cause. We hardly suppose a man to get small-pox unless he has been infected by another who has had small-pox But continued fever, or typhus fever, seems capable of being produced by a great number of causes, or—if I may so speak—by a number of imperfectly developed or imperfectly acting causes, and these, of course, may be infinitely various. We also see this very curious difference between typhus fever and the exanthemata,—that while, among the exanthemata, the one exciting cause always produces its own peculiar disease, the exciting cause of small-pox producing small-pox, the exciting cause of scarlatina producing scarlatina, the exciting cause of measles producing measles,—this does not seem to be the case with respect to fever. For here is one of the most important and interesting facts connected with the entire subject, that the same exciting cause—at least as far as we can see of it—is capable of producing different kinds of fever in different persons. This great fact has not been sufficiently dwelt on by the various writers on fever, on the Continent and in England, especially by that class of men whose object seems to have been to make themselves classifiers of diseases,—makers of classifications,—at which nature laughs.

Here is another of the great facts which show the impropriety of attempting to draw lines of distinction between what are termed the *typhus* fevers and the *typhoid* fevers—that the one exciting cause will in various persons produce two diseases. Now, we see nothing of this sort in the exanthemata. What may be the reason of this it is difficult to say; and we explain it very often by expressing the fact in different words. It is supposed that it may be due to some variation in the state of *receptivity* of the body at the time. For, in the production of the effect of the poison, there are two elements; first, the nature and composition of the poison which is to act; and, next, the chemico-vital state of the body which is to be acted on. The two causes combined produce the result—fever. But if, the cause being the same, the bodies be in different states, we may expect different kinds of fevers; and this is all that we can easily say on the subject.

Now, gentlemen, we come to another very important matter connected with fever, and rendering this affection remarkable, as compared with the pure *neuroses,* and also as compared with the anatomical diseases; and this is the subject of contagion, on which so much has been said and written.

In a course of lectures such as the present, the teacher should never omit any opportunity that may offer, to impress on the minds of his pupils some general rules for their conduct through life in the practice of their profession.

And here I would take the opportunity of saying, that I would advise you all never to range yourselves among the advocates of an exclusive doctrine. Do not, therefore, as far as fever is concerned, range yourselves either among the contagionists, or among the epidemists, or among the non-contagionists. The very moment a man ranges himself in the ranks of other men who are fighting for a particular doctrine, he places himself in a false position. His mind is occupied with the excitement of controversy rather than with the search of truth. He becomes an advocate, he ceases to be an inquirer; and the very moment that this change occurs in the mind of the medical observer, he loses, or ought to lose, caste in the ranks of science.

In looking at the subject of contagion, it is very true that the contagionists will present you with an enormous array of facts, and the non-contagionists will present you with another vast array of facts. The contagionists will show you a great number of cases where fever has been directly communicated. The non-contagionists will show you a great number of cases where this circumstance did not occur. Now, in one sense, you may say that the doctrines of both are true; in another sense they are both false. There can be no doubt that disease has originated, and may originate, with contagion.—This must be obvious to every man. The primary development of disease must have been without contagion. This is quite obvious.

Again, we see a vast number of cases in which disease is endemic. I need scarcely allude to the common case of ague. There are certain districts where ague are constantly produced, and where, if a man who has not had ague comes, and is not in contact with any human being whatever, he will, almost certainly, get ague. Here, then, clearly, there has been disease independently produced, or at least without *human* contagion. There are certain districts in South America, certain districts in the West Indies, vast districts on the coast of Africa, vast forest districts in Hindostan, where, if a man sleeps for a single night, although we will suppose him alone, without any companions but the wild beasts of the forests, that man will get some form of fever. It is a fact that cannot be denied. Then we see the epidemic of influenza; we see also—if you look at the history of Medicine—unquestionably even within the later periods of the world's history, the appearance of new diseases, totally new diseases. So that we cannot at all deny that disease may be generated, and that it may spread without the intervention of human contagion. We must believe, I say, in the spontaneous origin of diseases under some exciting cause; but that exciting cause need not be human contagion. On the other hand, innumerable facts show that fever existing in the system is capable of being propagated from one man to another; that it is, in fact, a contagious disease in the strictest sense; and this transmission of the disease may be not merely by contact, but by vicinity. Now, the facts which we must rely on to impress this doctrine of contagion on your mind, when you come to examine them, will appear less direct than you might suppose. A great number of men who have written on this subject really were but ill instructed in the rules of logic, and they have not been trained to think properly and exactly on the subjects they were considering. For instance, it was a great object with a number of the French school, especially those men who were the disciples of Broussais, and advocates of the physiological doctrine, to establish the non-contagion of disease. For the doctrine of contagion implies, you will see, essentiality; and the physiological doctrine was opposed to all essentiality. According to the physiological doctrine, there was no such thing as essential disease. Every disease was local and inflammatory. Therefore, in their anxiety to overturn essentialism, they found this outwork, as it were of contagion which should be carried. And nothing can be more singular, or, I may say, heroical, than the efforts which a number of the French physicians made to establish the non-contagion even of the most contagious diseases. Many of them went out to the Levant and exposed themselves purposely to the contagion of plague; put on the clothes of persons who were laboring under the plague; slept in beds with plague patients; inoculated themselves with the matter from the buboes of persons laboring under plague; in some instances actually inoculated themselves with the blood of plague patients. Well, in many cases these experimenters did not take this plague; and this fact is still relied upon by many of the French school as a proof of the non-contagion of plague and of fever generally. But you will at once see how very inconsequential these experiments are. Here are four or five cases of failure of contagion, and as well might you argue that corn does not grow from seed because the grain sown in the earth will sometimes fail to produce the plant. I may state here, however, that some of these investigators paid the terrible penalty of death in their zeal for science, for they did take the plague, and were lost.

Among the direct facts which satisfy our minds as to the contagious nature of fever, is the operation of contagion in large masses. I need hardly here allude to the singularly forcible argument in favor of contagion which may be drawn from the frightful mortality of our Irish medical brethren in the years 1847 and 1848. This subject I have already alluded to in the theatre of the Meath Hospital, and it is one which we can hardly look back upon without shuddering. The simple fact alone of the mortality of that class of individuals who are most exposed to the disease, furnishes an argument in favor of contagion which we would but weaken by any observations upon it. There is another curious mode of dealing with the indirect evidence for contagion, to which I shall draw your attention. You all know that Professor Louis, of Paris, has founded what he terms the numerical system of medical investigation; that is to say, he has attempted to reduce the facts of medicine to numerical expression; so that he would be able, as he supposes, to make medicine an almost exact science. Perhaps at some future period I will draw your attention more fully to the advantages and the disadvantages, to the possibilities and the impossibilities of the numerical system of Louis. My opinion, I may state, generally speaking, on the subject is, that, for the establishment of all that part of medicine which consists in establishing the data of physical diagnosis, the frequency or infrequency of certain pathological changes, and matters of that kind, the numerical system is infinitely valuable; but that we cannot, or have not yet been able to apply it to furnish rules of treatment. For the object of the numerical physician and the object of the practical physician—if I may make use of such a distinction—are different. The object of the numerical physician is to ascertain a rule of treatment which will cure the greatest number of cases out of a given number; but that should not be your object, or that of practical physicians. It is very well to know that such results have been obtained; but it does not follow that you are to act on them. Your object is, not blindly to adopt the formula founded on numerical data when it is shown that by its use you can cure the greatest number out of a given number; your object is to cure the diseases of A, B, and C, as they may come before you. And you are not to neglect what you believe to be right in the case of A, B, and C, because you have this array of figures declaring to you that such and such a course, different from that you may be about to pursue, is the rule for saving the greatest number of lives out of a given number. But we may safely use numbers in a different way—as, for example, investigating the data of a particular doctrine.

My father, when Professor of the Practice of Medicine in the Royal College of Surgeons, directed his attention very much to the subject of contagion. He was a strong advocate of the doctrine of contagion. Perhaps he went too far in his belief in the exclusiveness of the doctrine of contagion. Perhaps, also, he went too far in denying the doctrine of the epidemists, or the non-contagionists. However, that has nothing to do with the present question. He thought, that, in looking at the general circumstances which attended the spread of an epidemic in this country, the probabilities for or against the doctrine of contagion might be submitted to calculation. One of his most intimate friends was the celebrated Dr. Brinkley, Bishop of Cloyne, who was at one time the Astronomer-Royal of Ireland. He was admitted one of the very first mathematicians of his day, and was especially skilled in that difficult part of mathematical investigation, the doctrine of chances. Now, in the progress of an epidemic in Ireland, (and doubtless, also, in other countries,) in a family of twelve persons, the disease has been known to attack eleven out of the twelve. In some cases, the passing of the fever through so large a proportion as eleven individuals out of twelve, has taken a very considerable period of time, as you may readily understand. It has taken about three months to go through them all. Now, my father proposed these two problems to the Bishop of Cloyne, for solution:—

1st. "An epidemic prevails so severely, that one person out of seven sinks.

A family of twelve is selected in a particular district, before the epidemic has visited it. What is the chance that eleven out of that family shall take the disease, supposing the sickness of one of the family does not promote the sickening of another,—that is, supposing the disease not to be contagious, and supposing the family not to be unusually liable to disease?"

The answer furnished by Dr. Brinkley is, that the probability against such an event is 189,600,000 to 1. That is a very singular and extraordinary result.

2d. "The same general conditions being assumed and also that the number of inhabitants of a district is 7000, what is the chance that, in a family of twelve within the district, eleven will sicken?"

Answer: "The chance then is 300,000 to 1 that no family of twelve persons, in a population of 7000, will have eleven persons sick."

The numbers furnish proofs so convincing of the the truth of the doctrine of contagion, that it is hardly necessary to go further. The facts on which they were based are ascertained facts; they have been common facts in epidemic fever; but, recollecting that they were common facts, the chances against their happening, if the disease were not contagious, would be 189,600,000 to 1 in the one case, and 300,000 to 1 in the other.

LECTURE III.

I told you in our first lecture, that we knew nothing of the proximate cause of fever. In this respect, however, fever is not singular; for we know little of the proximate cause of any disease. Practically, fevers, are divided into the essential and the symptomatic fevers. I need not describe to you what is meant by these terms. I showed you, in our first lecture, that among essential fevers we must reckon a great variety of diseases. All the exanthemata are essential fevers; influenza is an essential fever, typhus, typhoid fever, intermittent fever, remittent fever, the plague, the yellow fever, are essential fevers; and I believe, we might also add cholera.

We will not attempt to define fever. We may, however, describe it as a morbid state of the system, which is under the law of periodicity. This morbid state is capable of destroying life without the production of any known anatomical change. You must take this with you as the basis of all your views of fever,—that, in the present state of knowledge, we have no anatomical expression whatsoever for the disease. Even with the assistance of the microscope, the result, as far as fever is concerned, is very much the same as that with regard to the neuroses. We have not yet, even with the assistance of the microscope, been able to discover the anatomical character of fever. However, although it is capable of destroying life without any known anatomical change, we find that it frequently does produce changes in organs, and those changes, when produced, influence the character of the fever. They not only influence the character of the fever, but they themselves may be the cause of death. To give you an example of a local affection influencing the character of fever, we may refer to the affections of the abdomen or the chest; if the local affections are confined to the belly, we shall then have a peculiar character of fever. We shall have the belly swelled, diarrhœa, thirst, and a variety of other symptoms. Again, if the local symptoms are predominant in the chest, we shall have livid countenance, difficult breathing, and the conditions which result from imperfect arterialization of the blood. Again, the same observations will apply to the case in which the nervous system is engaged—symptoms of diseases of the brain may be developed. A diseased intestine may be the cause of death by exhaustion, the patient sinking from diarrhœa; or an ulcer of the intestine may be suddenly attacked with peritonitis, which is the cause of death. Again, a secondary bronchial affection, or congestion of the lung, may go on to such a degree as to destroy life by asphyxia; and this is not an uncommon case in individuals whose bronchial disease has been neglected in the course of the fever. A very extensive experience justifies this conclusion, that in a large number of those cases of fever which we find in the records of medicine, where death took place by what is called effusion into the chest, and where that effusion is attributed to debility or exhaustion, the real explanation is—that those patients had for a long time, before their death, a progressive secondary disease of the bronchial membrane, which was overlooked and neglected, and when it rose to its height, attention was drawn to it when it was too late.

Now, let us consider the local symptoms of fever. We find that these are of several kinds. One class of them may be termed, for want of a better name, neurotic or nervous—that is to say, singular phenomena of functional alteration occur without organic change. I believe that there are none of the great organs of the body which in fever may not exhibit this curious class of symptoms. In connection with the brain, we have delirium constantly, as a neurotic condition in fever; pain as a neurotic condition; convulsions as a neurotic condition; coma, and so on. If we go to the thorax, we often find cough and accelerated breathing without any anatomical change of the lung. If we turn to the abdomen, we find many of the symptoms which are attributed to actual anatomical disease, yet they may exist altogether independent of it. We find great tenderness of the epigastrium, and yet no gastritis, no peritonitis, no inflammation of the liver. We find swelling of the abdomen, without any anatomical disease; we find diarrhœa without any anatomical change; and so we observe, that there are none of the great organs that may not occasionally exhibit those curious conditions of symptoms depending upon functional alteration. This is the first class of symptoms. The next class includes those which depend on special anatomical change. We have this change in the brain; we may have it in the lungs; we may have it in the heart, in the spleen, or in the glands of the intestine. In the lungs, we recognize it by râle, cough, expectoration, the filling up of the tubes with muco-puriform matter, and, on dissection, tumefaction of the mucus membrane, attended by lividity, vascularity, softening, or even ulceration. In the heart, we find it accompanied by signs of softening of this organ, generally speaking, confined to the arterial or systemic heart. Many of you are no doubt familiar with the local changes which occur in the spleen and in the intestine.

Then we come to the third class of local affections in fever, and this is a very curious and important one. The condition of the parts here is, as it were, a compound condition. The organ is supposed to have suffered infilteration of what is termed the typhoid matter; it has become swollen and enlarged. This is a condition which is capable of retrocession, without any consequent injury to the part; but in certain cases this retrocession does not take place, or it is interrupted by actual inflammation of the tissues which are thus infiltrated. Thus, we have three very important classes of local affections, which, though organic at first, are not inflammatory, but which become complicated with a secondary or retractive inflammation. There is, I believe, a fourth set of local symptoms, or of local affections if you will, in fever, which has not, perhaps, received sufficient attention. I think it is extremely likely, that, in certain cases, we have organs suffering from want of a natural supply of blood; and that is extremely likely to take place as far as the nervous system, at all events, is concerned. Any of you that have turned your attention to the subject of the fatty degeneration of the heart, so often brought before the Pathological Society of Dublin,—will recollect, that one of the most remarkable symptoms of this affection is, that the patient is liable to repeated and extraordinary attacks of nervous disease; and nervous disease shown by frequent attacks of syncope, or by apoplectic attacks continually repeated, very often, without consequent paralysis, but in some cases with paralysis. This is an illustration of the development of extremely nervous symptoms, not from fullness or congestion of the brain, but from an anæmia of the brain; and it illustrates the great pathological proposition—it is one of many illustrations of it—that similar symptoms, or nearly similar symptoms, may arise from essentially opposite conditions. We know that apoplexy and paralysis frequently arise from hæmorrhage into the brain; we find that they also arise from anæmia of the brain. In the disease to which I so long directed the attention of the classes in this Hospital—the typhoid softening of the heart—there is a great probability, indeed, that the brain, under those circumstances, suffers from anæmia; and it may be—though this is a point which has not been at all sufficiently worked out—that many of the extraordinary nervous symptoms in fever, to which we can assign no anatomical cause, really proceed from an anæmic condition of the brain, the result of a temporary softening or weakening of the left ventricle; in fact, that in typhoid fever there is produced, for a certain number of days, the condition which is seen as a chronic state in the fatty degeneration of the heart. It requires very little acumen to perceive, that if the brain is liable to this fourth and curious set of local disturbances, other organs may suffer in the same way. This is a subject which at present is by no means worked out. I merely throw it out for your consideration. But we might enquire, whether the tolerance of wine in typhus is in any way to be explained by an anæmic state of the brain. There are few things more curious than the power which is shown by patients in typhus, of bearing a quantity of wine or brandy without intoxication. They will often swallow many times more wine than would make them quite drunk, if they had not typhus; and wine becomes a sedative, rather than a stimulant, so far as symptoms are concerned. Does not this indicate a state of the brain the opposite, in some respects, to that of health? I do not want you to believe than all the good effect by wine is derived from its action on the weakened heart; for it may be that the direct influence of the stimulant itself on the nervous matter may be a cause; but, whether we take in one or both modes of action, its effect indicates a condition of the circulating and nervous systems the opposite to that of inflammation, as we understand the term.

We come now to announce this very important proposition, that the condition of fever, or, if you will, the poison of fever, is capable of producing local symptoms without organic change. We can understand the poison of fever producing a general fever without any local symptoms; that is easy enough to be understood; but it requires a good deal of teaching and observation to persuade men that the poison of fever is capable of producing local symptoms without any organic change. It is quite impossible to exaggerate the importance of this proposition as a guide in the practice of Medicine, for it is because this proposition has not been sufficiently accepted,—because it has not been engraved upon the minds of the Medical and Surgical students, that so much mischief is done in the treatment of fever. There is one grand rule, and, if you did nothing else for the whole of the session but learn it, your time would be well spent,—and it it this, that those rules of diagnosis of local diseases which are to be accepted as true in cases which are not typhus fever, lose their value to a great degree when the disease is typhus fever. This applies to the local symptoms in connexion with the three great cavities. You are not to apply the rules of diagnosis, drawn from the observation of diseases which are not fever, because fever is a special, essential state, and has its own conditions and its own rules. And this confirms the observation which I made in the Introductory Lecture, that the student, no matter how extensive his education may have been in Surgery, and in Medicine outside a fever hospital, has really only learned half of his business, if he has not studied fever at the bed-side. In consequence of ignorance of this rule, men having a case of fever with symptoms which, they had been led to believe, in cases not fever, were indicative of local inflammation, at once proceeded to treat the case as one of local inflammation.

The patient on the 10th or 12th day of typhus fever is watchful, delirious, violent, complains of great distress in his head, and so on. Well, what does the practitioner do, who has not learned this rule? He shaves the head; he applies ice to it; puts on a dozen or two of leeches, and what is the result? The result too frequently is, that the patient dies rapidly. The symptoms in this case were not the result of inflammation of the brain; they were not the result of hyperæmia of the brain. There was, perhaps, an exactly opposite state; at all events it was not such as to require depletion; the patient was suffering under general debility, and he sinks under the doctor. This is still a common case. I have seen applications of leeches to the head in an advanced stage of fever with delirium, almost as certainly fatal as a pistol shot through the brain would be. Here let me give you the observations of Louis, illustrative of the actual value of the symptom of delirium, as an indication of inflammation of the brain in fever; and I may mention here, that as Louis' observations were drawn from the Continental typhoid fever, they must be considered as still more applicable to our disease; because in the Continental typhoid fever there seems to be a greater probability that the local symptom shall be connected, or is really connected with local irritation, than it is here. He took, in the first place, 12 fatal cases of typhoid fever, which did not present the symptom of delirium. In 4 of these cases he found redness of the brain, in 6 the brain was perfectly healthy, and in 2 there was slight softening of the brain. Now, let us take his 12 other cases, in which delirium was an extremely prominent symptom. In many of them the patients were violently delirious. In 5 of these cases there was redness of the brain, in 5 the brain was perfectly healthly, in 1 there was slight softening, and in 1 slight injection. Now, compare these two sets of results, and see how extremely similar they are. Where there was no delirium 4 patients presented redness of the brain; where there was delirium 5 presented redness of the brain. Where there was no delirium 6 presented the brain perfectly healthy; where there was violent delirium 5 presented the brain perfectly healthy. The other cases may go for nothing. The result is extremely valuable indeed, as showing how very little we can depend upon the symptoms of excitement of the brain, as an indication of organic disease when the patient is in fever.

Now, let us go to some other organ,—take the heart. "Well," you will say, "the heart need not be taken, because in most of our cases the heart shows a depressed state, and not an irritated state." But there are many cases of fever in which the heart is violently excited, as you will have frequent occasion to see. What is the result of dissection in those cases of excited heart in fever? There are two conditions which, according to ordinarily received notions, should lead you to expect irritation or inflammation of an organ; first, that the patient has fever, and next that you have an organ in a state of great excitement. If the patient had not typhus fever, but had fever which was not typhus, and an excited organ, the chance would be that that organ would be found in a condition of inflammation. If a man has fever which is not typhus fever, and his lungs are excited, we find bronchitis or pneumonia; if the pleura is excited, we find pleuritis, and so on. But here is a case of typhus fever, with extraordinary excitement of the organ, and when you come to dissect the parts you find the heart perfectly healthy,—not the slightest sign of disease is found; and the same observation will frequently apply to the digestive system. You will have tenderness on pressure of the abdomen, extreme thirst, nausea, and vomiting. Yet, on dissection, the mucous membrane will be found pale, and there will be no sign of disease. If a patient who had not typhus fever had a red tongue, or a dry and cracked tongue, if he had thirst; if he had vomiting and tender epigastrium, every one would say, this patient has gastritis, and, in all probability, he would have gastritis. But in fever the state of the tongue is no sign whatsoever of gastritis; for each of you that has worked in the fever-wards here must have seen that we are totally regardless of the condition of the tongue in the administration of the most powerful stimulants; and we find that one of the best modes of removing the redness of the tongue in fever is to give hot brandy, or large quantities of wine, or such stimulants as bark and ammonia.

Again, take the eye. Delirium ferox with an injected eye is the expression of inflammation of the brain where the patient has not typhus fever. But take a case of fever, and is the injected eye a sign of cerebritis? Certainly not. It is merely to be looked upon in the same way as the tongue—it is a local affection under the dominion of the general disease. The truth is, that disease of a true inflammatory character is the rarest thing possible in fever; it is so rare, that some do not believe that it ever occurs. Apply this axiom, then, to treatment, and see what becomes of that doctrine which advocates bleeding in fever, which advocates starvation and purging in fever, which forbids the use of wine, and other stimulants. There is another very important view or argument to be referred to here, which all practical men will understand. If fever was a group of inflammations, or if it was symptomatic of any one inflammation; in other words, if it was an inflammatory disease, we ought to expect that in the larger number of patients who had gone through the process of fever, chronic diseases of the organs would be developed. If a patient has acute rheumatism we find that his heart may become engaged. He recovers from rheumatism, and then he has a progressive organic disease of his heart. When you reflect upon the extent of fever, the great number of persons that have been at some time in their lives attacked with fever, you should at once come to the conclusion, that if those fevers were examples of groups of local inflammations, we should have a much greater quantity of organic local diseases consequent upon them: but what is the fact? The fact is, that such accidents are extremely rare. How few cases can be adduced of confirmed mania as a consequence of fever! How few cases can be adduced of paralysis, or apoplexy, or of hydrocephalus, as a consequence of fever! Surely if, in this enormous number of cases of fever with violent head symptoms, there had been inflammation of the brain in some of them, at all events we should have as a consequence, progressive disorganization of the part. Again, take the thorax. How few instances are there on record of chronic progressive pneumonia after fever; how few of chronic pleuritis; how few cases of atrophy of the lung; how few cases of anatomical changes which end in progressive organic disease, which has started from an inflammatory disease that took its origin pending a fever! Go to the heart. We have two classes of heart affections in fever: one, a softening and weakening of the heart, and the other an excitement of the heart. I don't care which of them you take. Do we find that, after a recovery from fever, in persons who have had either of those affections of the heart during the fever, there is a liability to valvular disease,—that there is a liability to hypertrophy of the heart,—that there is an adhesion of the pericardium? Nothing of the kind results. The fact is, that those organs have never been in a state of inflammation. They have suffered pending the fever, and, the fever having left them, the parts are restored to their normal condition. This is a very important consideration, and you may extend it still further. If fever was an inflammation of the blood-vessels, is it not to be supposed that we should have many cases of disease of the aorta in the thousands of persons who have gone through fever? Yet we find no such results. If you go to the digestive system, (and this is, perhaps, the system, of all others, which is the most liable to organic change,—at least in the Continental fevers,)—take the peritoneum. How few cases do we find—or have we any case to show—of chronic peritonitis, as the result of typhus fever? Not that I know or ever read of; and yet the patient may have had symptoms of severe irritation of the abdomen pending his fever. In fact, all that we know of disease of the peritoneum, in connexion with fever, is simply that, in certain cases of ulceration of the intestine, a solution of continuity of the peritoneum takes place, and the fæcal matter is effused into the cavity, and the patient dies of acute peritonitis. But that does not touch my argument. Where are the causes of chronic diseases of the liver springing out of typhus fever? It has been a long portion of medical doctrine,—it has become a traditional doctrine,—and every thing which is traditional in medicine is to be respected,—that fever has a depuratory effect on the system. Now whether it has a depuratory effect or not, we shall not here inquire; but the very fact of the existence of that doctrine, which is much older than pathological anatomy, implies, at all events, a very general belief that fever does not damage organs; for if it did damage the various organs that exhibit local symptons in the course of affection, we should not have the doctrine established of its having a depuratory effect. The cases of the establishment of a chronic ulcerative condition of the intestinal tube might be adduced in opposition to these views, but I do not place much weight upon them. We may divide them into two classes; in the one, diarrhœa, or some other symptom, is established during the fever, which latter runs indefinitely—here the typhoid disease of the mucous glands has been attended with re-active irritation, and this has interfered with the action of the laws of periodicity. In the next case, the fever may be supposed to have ceased, but so much disorganization has occurred that the ulcerative process seems to go on as it might be supposed to do in another case where no typhus had preceded it. The cases related by Dr. Cheyne, in the first and second volumes of the "Dublin Hospital Reports," appear to be examples of these forms of disease.—*Virginia Medical and Surgical Journal.*

[For the N. H. Journal of Medicine.]

ON THE REMOVAL OF EUCYSTED GELATINOUS TUMORS OR WENS. BY ARIEL HUNTON, M. D. If we propose to operate on a person by means of a cutting instrument, fear and dread are at once depicted on the countenance; especially is this the case if the instrument is presented to his view.

A patient has one of the above tumors which he wishes removed. You explain to him that you will divide the skin and dissect out the tumor. He shrinks from the operation, although trivial in itself; but inform him that you will divide the tumor and then press out the contents, he will readily consent.

For some fifteen years I have practiced the following method: If the tumor is oval (as many of them are,) I divide them in the longitudinal direction, press out the contents (which vary in consistence from that of the white of an egg to that of a curd,) remove the blood till it ceases to flow; I then take my spring dressing-forceps, shut them, introduce the points into the wound and allow the force of the spring to separate or spread open the incision. I then drop in some escharotic substance, remove the forceps and close the wound. I let this remain four or five days; if inflammation follows, use a poultice. At the end of this time the cyst, which is white and resembles cartilage, can be easily removed by a scoop or forceps, causing little or no pain, and a cure follows.

As an escharotic I have used sulphate of zinc, sulphate of copper, red precipitate and corrosive sublimate; the sulphate of zinc most frequently.

A young lady who had one of these tumors on the upper eye-lid, of the size of a large pea, wished it removed. I explained to her the method of removal by the knife. This she peremptorily refused, fearing that her eye would be spoiled. After reflecting on the case I proposed the method above described, which with her consent I practiced with a success perfectly satisfactory to myself and patient. Since then I have practiced the above method in all my cases.

Where the tumor is so large that all the skin cannot be saved, the extirpation of the cyst by the knife may be preferable.

Hyde Park, Vt., Sept. 15th, 1854.

[Any means which will produce inflammation and suppuration of the cyst will prove effectual. A seton is a convenient and reliable remedy. External violence, if sufficient to excite inflammation, will do the cure. We had on the nape of our own neck a small tumor of the size of a pea, which remained unchanged for some twenty years. Sometime in 1853 we discovered that it was rapidly increasing in size. Visions of sharp knives and extirpation came before our eyes, and we found ourself involuntarily and continually feeling it over to ascertain the rapidity of its growth. The continued irritation of handling and pressing caused inflammation and suppuration of the cyst, and upon making an incision the cyst was found loose and was evacuated with the first gush of pus. Of course the cure was perfect and any dread of the knife removed.—*Editor.*]

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, OCTOBER, 1854.

Errata. Separation of the Placenta. Our venerable friend, Dr. Hunton, complains that the types made him say in our last number that the uterus "*falls* up" (instead of "*fulls* up") to produce separation of the placenta. Although we read the "proof" of his article ourself, the substitution of one vowel for another escaped our eyes; ("the reason why we cannot tell,") but the change of a single letter made an essential difference in the sense of the sentence. However, we do not so much regret the accident, as it has drawn from our friend a letter on the subject, from which we extract the following, which tells the whole philosophy of the separation of the placenta in the fewest words possible: "Are not the walls of the uterus thickened when contractions take place as we wish? These contractions (or the *fulling* up of the womb) are the cause and the only cause of the separation of the placenta; it shoves itself from that body, leaving it free to be extracted or withdrawn. If it does not contract, there is no way but to leave your patient to a nearly hopeless fate, or to introduce your hand and peel off the placenta from the walls of the uterus."

While we endorse the views of Dr. H. in relation to the physiology of this process, we must say that we consider the cases proper for manual separation of the placenta very rare. In case of hemorrhage, prompt and decisive interference to remove the placenta and excite the uterus to contract, can alone avail, and there is no means half so certain to produce the latter effect as the introduction of the hand. But in case of retention of the placenta, unaccompanied by hemorrhage or other urgent symptoms, we should *wait*, carefully consider all the relations of the case, and be fully impressed with the absolute necessity of manual interference before we should resort to forcible separation and removal of the placenta. We have removed it (and safely, too,) in cases in which we should now "wait a little longer." We have a holy horror of "meddlesome midwifery," which increases with our years; not from any natural timidity, for no one who knows us will vote us loth to practice "*operative* medicine" when occasion requires, but viewing parturition as one of the *healthy* functions of the body, we have no desire to interfere in any case, without evidence that nature is insufficient to accomplish her own work in safety.

We would be obliged to our friend Dr. H., who is one of the most eminent Obstetricians in New-England, if he will favor us with his experience in manual interference in cases of retained placenta.

AUSCULTATION AND PERCUSSION. BY DR. JOSEPH SKODA. *Translated from the fourth edition by* W. O. MARKHAM, M. D. *Published by* LINDSAY & BLAKISTON, *Philadelphia.*

This is the great work of a great man, and no one can read it without being excited to greater care and patience in the study of the physical signs of disease; to place more reliance upon accurate observation and less upon the mere opinion of even great men. It may truly be called an Essay on Natural Philosophy, as it is certainly one of the most clear, logical, and philosophical works ever issued from any press.

The author differs from his predecessors in some important particulars, and urges his ideas in a spirit of candor worthy of imitation. This is not a book for a cursory examination, but to be carefully and thoughtfully studied; therefore, while we recommend it as specially fitted for the thorough student, and as exciting to enlarged and comprehensive views of the phenomena of health and disease, it will be of little use to any one who is willing to rest satisfied with a superficial knowledge of the subject.

FRUITS AND FARINACEA: THE PROPER FOOD FOR MAN. This is the title of a work issued by Fowler and Wells in parts; we have received parts 2 and 3. If the publishers see fit to send us the remaining numbers, we will tell them what we think of it; but must beg to be excused from expressing an opinion of a work of which we have only seen a part.

TRANSACTIONS OF THE MEDICAL ASSOCIATION OF THE STATE OF ALABAMA, *at its seventh annual session* (*June*, 1854). This volume contains 190 pages, and is creditable to the STATE from which it comes. It contains "reports," "cases," and "addresses," which embody much valuable information. We have marked some of these articles for transmission to our pages at some future time.

"EL PORVENIR MEDICO." We have several copies of a medical journal bearing the above title, published at Madrid; and as its contents are all "*Dutch*" to us, we will be pleased to forward them to any of our readers who can dig the contents from the Spanish envelope which renders them a "sealed book" to our plain English understanding.

PROBATE DIRECTORY. Our publisher, Mr. LYON, has issued a new edition of this book. Although physicians are usually disposed to shun the law and advise their patients to do the same, they are frequently consulted in relation to estates of deceased persons, or by their patients in relation to a disposition of their property; and it is well to be able to aid our friends in cases of emergency, or when they are either unable or unwilling to consult a lawyer. Those who wish for any information on these subjects can obtain it from this book, which is the work of Hon. HORACE CHASE, the oldest Probate Judge in the State. Price, $1.00.

THE "KITTREDGE BONE OINTMENT." BY ARIEL HUNTON, M. D.—I will give a receipt of the *Kittredge Bone Ointment*, which has been used with celebrity by men of that name in New-England for more than a century. It is used by them and others in contusions, sprains, fractures, dislocations, phlegmonous inflammations, &c. In obstetricy it is very useful to lubricate the vagina and perineum, it facilitates dilation, and mitigates the pains in the passage through the vulva. The tenderness usually experienced by females in the vagina after parturition, is promptly relieved by an application of this ointment.

RECEIPT FOR MAKING THE KITTREGE BONE OINTMENT.

℞ Melilotus Officinalis,
Malva Sylvestris,
Salvia Officinalis,
Nicotiana Tabacum, one larg plug,
Humulus Lupulus, fol.
Plantago Major, "
Sambucus Canadens. "
Aretium Lappa, "
Lillium Flavum, rad.
Anthemis Nobilis,
Artemisia Absinthium,
Solanum Nigrum, American Nightshade,
Viola Tricolor,
Hypesicum perforatum, St. John's wort.

Rumex Acestus, fol.
Symphytum Officinale, “
Hyoscyamus Niger, “
Cannabis Sativa, “
Sempervirens Tectorum,
Datura Stramonium,
Prunella Vulgaris—à à pugil.

The receipt, it will be observed, is a farrago of narcotic and mucilaginous vegetables, and a few vulnerary herbs and roots. They should be gathered the last of July or first of August, when the virtues have attained maturity, and the articles are in full vigor. There should be enough of the article to fully saturate the lard, and they should be used while green. I seldom obtain all the articles—the most essential are the narcotic and mucilaginous. I usually make ten pounds each year. My receipt was originally from Dr. Jonathan Kittredge, of Canterbury, N. H.

Put your herbs in an iron vessel, with a cover, add one gill of water to obviate incineration, add your lard or butter the quantity you intend to prepare, simmer over a slow fire a long time, at least two days, and until the herbs are fried, or crisped, then strain with pressure.

At this warm season, after the morning or evening repast is cooked the fire is suffered to subside, I then set my pot over the fire, and let it remain until the fire goes out. I do this every day, or twice a day, for two or three weeks, stirring the herbs occasionally.

I have used this ointment forty years, and can speak in its favor. I believe that any physician who will take the trouble to prepare the article and use it as directed, will be amply paid for so doing.—*N. J. Med. Reporter.*

Hyde Park, Vt., July, 1854.

The Efficiency of the Sulphuric Acid in Diarrhœa.—By Goodee Bowra, Esq., M. R. C. S. E.

As much has been said and written lately on the treatment of diarrhœa, I beg to offer my testimony on the happy effect of sulphuric acid on persons of all ages, with the full conviction that it is the quickest and most palatable way, consequently the best remedy for that disease.

I was requested two years ago to send medicine to a young lady subject to diarrhœa, who took passage to China in a ship not carrying a surgeon. Thinking there must be some mistake, I went on board the vessel and saw the chief officer, who thought himself quite competent to treat (from books and a medicine chest) any disorder likely to arise on the voyage. On asking this gentleman what he would do in cases of diarrhœa, his off-hand reply was: “I never care for that; always carry plenty of sulphuric acid on board, and I have never known it to fail.”

On the same evening I was called to a lady seventy-five years of age, very subject to these attacks, which always lasted a week or more, and as it was of great consequence she should return into the country in two days, I made up my mind to try the sulphuric acid, believing I should not be more successful with the old chalk mixture than her medical friend at home.

The following morning I found her up, and so much better that she had only taken two doses. I gave her a third, which completely cured her. Since then I have used nothing else (save a mustard poultice) in all cases, either with or without pain, both in private practice, and at an institution to which I was attached, and I confidently state that during the whole period I have used it I have not met with one unsuccessful case. The only difficulty is to persuade some people that acids would not increase their disorder, particularly those accustomed to the old chalk and aromatic confection treatment.

I now constantly recommend patients subject to diarrhœa, or who are nervous about cholera, to keep a bottle of sulphuric acid mixture in the house, and on the first symptom of their complaint instantly to take a dose, which is generally sufficient to effect a cure. Many of these patients (I fear jokingly) tell me they shall expect double charges, as two or three draughts of the acid mixture have more effect than the same number of bottles of chalk mixture; and I may add, I feel so satisfied with the success of a two years' trial, that I have no hesitation in asserting it as my full belief, that deaths from cholera and diarrhœa would be very materially diminished if the authorities would appoint an agent in all poor neighborhoods, to give a dose of the sulphuric acid mixture to every necessitous applicant suffering from bowel complaint. They would have plenty of persons desirous of availing themselves of this remedy, if I may judge from the gallons I gave away last summer.—*London Lancet.*

NEW MODE OF PREPARING QINTMENT OF MIRATE OF MERCURY. We copy the following note from Mr Wilder's recently published treatise on the *Diseases of the Ear*:—There is no other medicine in the whole materia medica so frequently prescribed by the practitioner which presents the same differences, both in appearance and effects, as the ointment of the nitrate of mercury. Prepared as directed in any of the pharmacopœias of the three kingdoms, it is impossible to procure it alike in any four establishments. It is found of all shades of color,—straw-colored, gray, green, yellow, orange, and of every degree of consistence, dry and hard, or soft and pasty. If mixed with almond oil, as in diluting it into an eye-salve, it soon becomes green, and gets a very unpleasant smell, whether covered up or not; and in this state it is often very irritating. Many apothecaries in Dublin do not adhere to the pharmacopœial formula, but make it up according to a form of their own; some use fresh butter instead of lard; and others different kinds of oil, as from habit or experience they find best. On explaining my difficulties, some years ago, to Mr. Donovan, he procured me a citrine ointment of a very dark orange or brown color, soft, perfectly and equally smooth, and which does not alter in any way by keeping, by exposure to light, by mixing with oils, or even by being gently heated to the point of fluidity; and it never acquires an acid smell. Its therapeutic effects I have had long experience of, and they are decidedly superior to those of the ointment in common use. Mr. Donovan has not made its constituents, nor its mode of preparation. Mr. Nicholls has made for me a citrine ointment precisely similar in color, smell, consistence and effects; and he informs me that he uses rape oil instead of olive oil, and does not let the heat employed during the preparation exceed 200 deg. Mr. John Evans has employed cod-liver oil, and also seal oil, and the preparations thus produced are exceedingly elegant and useful ones. Mr. Carroll likewise uses cod-liver oil in the composition of this unguent. Messrs. Bowley have obtained for me a brown citrine ointment, somewhat like those already mentioned, and they inform me that it is by using only the very pure olive oil. I find this ointment a very decided improvement on the old preparation, and its composition should be investigated by those engaged in the preparation of medicines and pharmacopœias. When about to be used, it should be melted to the consistence of cream by placing the vessel containing it in hot water. It forms an admirable application in ophthalmia tarsi, as well as in various diseases of the ear.—*N. Y. Med. Journal.*

From the American Medical Monthly.

AMERICAN MEDICAL ASSOCIATION.

The following circular has been issued by the Treasurer of the National Association, and explains itself. We copy it for the benefit of those who may not receive a copy, calling especial attention to the fact that payment should not be delayed.

At the meeting of the American Medical Association, held at St. Louis in May last, the following resolutions were adopted, viz:

Resolved, That the sum of three dollars, annually, be assessed upon each of the Delegates to the sessions of the Association, as well as upon each of its permanent members, for the purpose of raising a fund to defray the expenses of printing the Transactions. The payment of this assessment shall be required of the Delegates and Members in attendance upon the Sessions of the Association previously to taking seats and participating in the business of the Session, and of all others on or before the first day of September in each year.

Resolved, That each Delegate and Member who has paid his annual assessment, in accordance with the terms of the above resolution, shall be entitled to receive a copy of the printed Transactions of the Session.

Resolved, That the name of no one shall be inserted or continued on the list of permanent Members of the Association, who shall refuse or neglect to pay his annual assessment, in accordance with the terms of the first resolution.

The immediate attention of all members who have not complied with the requisitions contained in the above resolutions, is respectfully but earnestly requested. The Publishing Committee, of which Dr. Pliny Earle is Chairman, is desirous of putting the Transactions to press as soon as practicable. This cannot be done, however, until some idea can be formed of the number of copies required, and *this* can only be arrived at from the number of members being known who have actually paid the assessment alluded to. It will be observed, should any member delay payment until the 1st of September, he may be unable to obtain a copy of the Transactions.

Members will please be particular, when sending their dues and orders for copies, to give the name of the town or city, county and State, as well as their own names, clearly and distinctly written, that mistakes may be avoided in transmitting the volume,—also, express their wishes as to the mode of forwarding the Transactions.

Respectfully,
ISAAC WOOD, *Treasurer*,
68 East 17th street.
New York, June 13, 1854.

Medical Treatment of Cataract. Evidence of want of independence in the American medical press and a disposition to bow to authority. We published some ten years ago, in the Medical Examiner of this city, several marked cases of cataract, cured by medical treatment alone. The Charleston, and several other medical journals, copied the article, with a remark or two appended. A sapient writer in the Monthly News, of this city, insinuated that the reporters of such cases were not competent judges of cataract—and were doubtless mistaken in the character of the disease. This was all the notice taken of the matter until a few months since, when an Italian author published several cases of capsular and lenticular cataract, cured by medical treatment. The cases were scarcely translated to American pages, ere several others of the same kind appeared in our journals—and the last number of this journal (taken from the Virginia Medical and Surgical) contains cases by several of the medical men of Virginia treated in this way. When will American physicians throw off the incumbus of foreign authority, and think for themselves? There will now be plenty of evidence of the fact that certain forms of cataract are curable by medical means.—*Phil. Med. and Surgical Journal.*

Note. An arrangement has been made by which any number of copies of the Transactions of the Association can be had by members of the N. H. Medical Society by remitting $3.00 to Dr. E. K. Webster, *Boscawen, N. H.* The book is to be bound, which will render it much more valuable. —*Ed. N. H. Jour. Med.*

THE

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Vol. IV. NOVEMBER, 1854. No. 11.

WATER DRESSING.

BY GEO. H. HUBBARD, M. D.

The following cases are selected to illustrate the success attending the treatment of wounds with water. Although not of great importance as "interesting cases," if their publication can induce any one to abandon the burdensome and too often injurious appliances which have been customary in times gone by, and to substitute therefor the simple treatment by water, a mode of treatment sanctioned by the best surgeons of the present day, perhaps as much good may be accomplished as by a lengthy detail of more intricate and unusual diseases.

In some notes on "water," which I furnished for a previous volume of this Journal, I entered somewhat into the history of its use as a therapeutical agent. At this time I purpose only to give a few cases in proof of the propositions then advanced, that "water is our best dressing in wounds of all kinds."

Case 1st. *Incised wound of the knee.* D. P., age 18, made a mis-step while mowing, and in falling struck his knee on the scythe, which rested on the ground with its edge so inclined that the whole weight of his body came upon it at right angles. It was consequently forced into the limb as far as such a blow could drive a sharp edge into bone. The resulting, clean, incised wound severed the Ligamentum Patellæ, about midway of its length; not directly across, but obliquely, its internal angle being just one inch lower down the limb than the external. The wound was precisely four and seven eighths inches in length. The capsule of the joint was opened by a clean incision, seven eighths of an inch long at the external angle of the wound, and a piece of the head of the tibia was split off and slightly movable at the inner angle; but as it could not be removed without cutting it from the ligaments of the joint to which it was attached, it was placed in as good coaptation as possible, and allowed to remain.

When I reached the patient (about an hour after the injury,) he was considerably depressed, perhaps as much, or more, from the fright which this gaping wound was calculated to produce, as from the injury. As no important branches of the anastomosing arteries were cut, the hemorrhage was slight, and that from the small cutaneous vessels had nearly ceased on my arrival. The lower portion of the ligamentum patellæ which protruded prominently from the wound, was, after removing some bits of grass, brought into exact coaptation, and kept so by means of the twisted suture, consisting of three steel needles, deeply inserted, one and one fourth inches apart. The limb was laid in a "Goodwin's Splint," and kept pefectly extended.

The wound was dressed in *water*, and was never dry for 25 days. The temperature of the water was gradually raised after the expiration of ten days, and regulated by the sensations of the patient; keeping it just so cold as was agreeable. For the first week his diet was *water gruel*, afterward additions were made, very gradually, so that he did not receive full liberty to eat as he chose, for five weeks.

After this wound was first dressed he had "*no pain*," lost no sleep, and there was but little swelling about the wound. No fever occurred; the wound united by first intention, except a small hole which kept open at the inner angle for a about five weeks; doubtless, on account of injury done the bone at that point, but at the end of this time it was entirely healed. Two of the needles were removed on the 18th day, and the third on the 21st. On the 40th day, he walked two miles with the aid of a small stick.

No medicine of any sort was at any time administered; the water was discontinued on the 25th day, and an envelop of cotton used to protect the knee both from injury and from cold.

At this time, 14 months after the injury, he is walking without the aid of a cane, engaged in all sorts of farm work, having rendered good service on the farm during the past season.

Case 2d. P. R., age 20, while chopping wood, misguided his axe and received its full force on the dorsum of the left foot. Taking a somewhat slanting direction it did not go through the foot, as a perpendicular blow of like momentum would have done, but split up portions of the tarsal and metatarsal bones, so that when I examined the foot about an hour after, I introduced my fingers to the depth of an inch and a half; removing the clotted blood and some small fragments of bone which were entirely separated. The wound was strapped tightly with strips of linen wet with collodion and a compress bound on to keep the split portions of bone in as good coaptation as possible. A splint, to keep the foot up so as to relax the muscles acting upon its anterior aspect, was used, as many of the extensor tendons were severed. This wound was dressed with "*water and nothing* *else;*" was never dry for two weeks; the temperature was raised as the sensations of the patient indicated; it united by first intention throughout its whole extent; there was no suppuration; the bones seemed to unite as readily as the integuments, and on the 28th day he went to his work with but slight lameness, from which he entirely recovered.

Case 3d. A girl, aged 10 years, tried her hand at chopping wood, and, from want of skill and strength, cut her foot severely. Upon examining the wound I found the great toe nearly severed from the foot, hanging only by the skin, flexor tendons, and vessels of its inferior part. The metatarso-phalangeal articulation was laid entirely open, and the whole articulating surface of the metatarsal bone cut off and loose in the wound, from which it was removed by snipping with scissors some few ligamentous fibres which had escaped the axe. The wound was cleaned and all loose portions of bone and clots of blood removed. When this was done, the bleeding, which had been profuse, ceased entirely. This wound was brought together by interrupted sutures, and the toe brought into as good shape as possible, and kept so by bandages. Water was the only application made, and to the surprise of all, no pain was felt; no sleep lost; the wound united by first intention, and she has a very good and serviceable toe. I am inclined to think excision of a joint was never more successful than in this case, nor the operation ever performed with a ruder instrument or less surgical skill.

Case 4th. A man came to me with a finger, the knuckle joint of which he had brought in contact with a circular saw. I found a ragged wound, which had opened the joint and removed portions of cartilage from the articulating surfaces of the bones. After removing all loose substance, the wound was brought together and dressed with collodion and strips of linen. He was ordered to keep it constantly wet with water, of such temperature as was agreeable, with which direction he faithfully complied. I saw the finger occasionally; but as no inflammation or suppuration occurred, I had no more to do with the case, and the first dressings were not removed till the wound was cured. The finger is nearly as serviceable as ever, the joint being but slightly stiffened.

THE PATHOLOGY AND TREATMENT OF HEMORRHOIDS.

By T. G. Richardson, M. D., *Demonstrator of Anatomy in the University of Louisville.*

ART. IV.

One of the most common, and by no means the least troublesome of the numerous diseases to which the rectum is liable, is that, the title of which stands at the head of this article; and considering its exceeding frequency and its great importance in a practical point of view, it is somewhat remarkable how lightly it is treated of in most of the text-books on general surgery, and how loose and unsatisfactory are the ideas of a majority of even the best practitioners of the country in regard both to its causes and nature, and the treatment required for its relief. It is with the hope of being able to put some of the readers of the Journal in possession of facts which the too slender libraries of many of them do not furnish, that I take the liberty of presenting them with the results of my observation and study.

General Considerations.—Under the common term *Hemorrhoids*, or *Piles*, are included two entirely distinct and separate affections, distinguished ordinarily by the prefixes 'external,' and 'internal,' or 'blind,' and 'bleeding' piles. It is true that they are both bloody tumors, produced by a modification of the same causes, often co-exist and are situated in adjacent parts of the same organ; but, as will be presently pointed out, they are totally different in their anatomy, in their course and consequences, and in the treatment demanded for their cure. The fact that they are so entirely dissimilar should be distinctly borne in mind, in order to avoid much of that practical confusion that seems to prevail, not only among physicians generally, but even among many distinguished lecturers and writers on surgery. That such confusion does exist one has only to take up and examine all the more familiar American and foreign books in which the subject is treated of, to be fully satisfied. In prosecuting some inquiries lately in regard to diseases of the rectum, I have had occasion to look over quite a number of publications of this sort, beside others of a more special character, and I must confess that, with one exception, I have found no clear and satisfactory recognition of the great distinction that is so absolutely necessary to make between these diseases. The exception is GROSS's Pathological Anatomy, wherein the celebrated author draws particular attention to the point in question, and leaves little or nothing to be desired in the way of an accurate and well-defined description of, and discrimination between the morbid anatomy of the two. The great majority of other writers acknowledge that there is a difference, but do not tell us precisely what it is, or at least fail to impress it upon the reader in such a manner as to make him feel its importance either in a pathological or practical point of view. Others again, (but fortunately very few,) and among them the world-renowned ABERNETHY, deny that there is any difference in structure, and consequently make none in practice.

In the following imperfect outline of the two affections, I have attempted to arrange their several characters in a sort of parallel light, so that their distinguishing marks may be more prominently brought into view than could have been done by giving a separate and continuous description of each.

1. *Diagnosis.*—*External Piles* are exceedingly common, occur for the most part about the middle period of life, although occasionlly observed in

young children,* are of exceeding frequency in females during parturition and the latter months of pregnancy, and prevail probably to a greater extent in Southern than in Northern latitudes. They are situated just at the *verge of the anus*, just where the skin of the nates and mucus membrane of the rectum become blended together, where they form tolerably firm, elastic, prominent, well-defined tumors of a brownish-red or purplish hue. They are generally multiple, often numbering as many as five or six, although frequently single, especially when large, and vary in size, from that of a medium shot to that of a large filbert. They are usually produced suddenly during parturition or violent straining at stool, and are generally attended, for a few days, with more or less pain, often of an acute character, and an annoying feeling as though a large foreign body were lodged between the nates. They are rarely if ever the seat of hemorrhage amounting to more than a few drachms, and only so when accidentally opened by rupture or ulceration.

Internal, or bleeding Piles are far less frequent than the external variety, seldom if ever occur as an uncomplicated affection before the age of twenty or twenty-five, and are, in this country, according to my own observation and inquiries, much more common among men than women. This last statement is, I am aware, at variance with the published authorities generally upon the subject, but not, as will be hereafter shown, with the nature of the causes producing the complaint. The only author to whom I can refer at this moment as having observed the same fact, is M. VIDAL, who states in his "*Pathologie Externe,*" that it is remarkable how few females, excepting those who have frequently borne children, are found to labor under tumors of this sort.

Internal Hemorrhoids are situated a short distance within the rectum, immediately above the internal sphincter muscle, and may be felt by the introduction of the finger as smooth, spongy, undefined swellings, occupying the space of an inch or two in an upward direction, and often the whole circumference of the bowel. When made to "come down" below the sphincter, as they nearly always are by violent efforts at evacuation, and as they always should be, if possible, when an examination is desired, they become erect and turgid with blood, and being partially strangulated by the contraction of the muscle just mentioned, present themselves externally in the form of large rounded tumors, of an intensely brownish-red or livid color, continuous with each other at their bases, and often so crowded together as to have the appearance of one large irregular mass, not unlike, and often mistaken for, prolapsus of the rectum. They are of comparatively slow growth, and generally multiple, the number varying from two or three to six or eight, although as just intimated, it is frequently impossible to discover their separating lines. When thus protruded they are usually the seat of a good deal of bearing-down pain, sometimes sufficient to produce fainting; and under these circumstances they are also exceedingly liable to hemorrhage from rough handling or simply from over-distention of the vessels. The amount of bleeding varies from a few drops to several ounces, and being habitual in many persons, frequently brings on, and keeps up a state of general anemia, by which the constitution is gradually, but surely undermined, and the life of the individual placed in imminent jeopardy.

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* Gross's Pathological Anatomy.

In suspected cases, where there is no protrusion, the existence of the disease is best ascertained by the use of a rectal speculum, consisting of a solid glass or metallic cylinder, with an oblong opening upon one side near the distal extremity.

Pathological Anatomy.—*External Piles* are formed by the rupture of one or more of the small veins that ramify about the verge of the anus. They consist, therefore, simply of a clot of blood occupying a corresponding cavity which it forms for itself in the loose areolar tissue of the part, and are covered on the lower side by the skin, and on the upper by the mucous membrane of the rectum. That this is the whole anatomy of tumors of this variety soon after their formation, I have fully satisfied myself by frequent dissections, thus verifying the observations of Prof. GROSS upon the same point.

Internal Piles belong to the class of erectile tumors, and consist essentially of masses of irregularly dilated, tortuous, and convoluted capillaries, mostly venous, occupying the submucus areolar tissue of the lower part of the rectum. They are in fact nearly similar, in every respect except in the mode of their production, to *nevus* or aneurism by anastomosis, and are hence sometimes called varicose hemorrhoids. Like nevi, they are, when in a state of rest, soft, flaccid, and spongy to the touch, but in consequence of the pressure on their venous trunks in violent straining, become swollen, and then, are generally forced out beyond the sphincter, and, as before remarked, if cut or scratched, or even roughly handled while in this state of turgescence or erection, bleed, sometimes so profusely as to produce syncope, and occasionally endanger the life of the individual. In most cases the mucus membrane covering the congeries of vessels is thin and delicate, but in consequence of frequent protrusion and handling it may take on a condition of chronic inflammation, producing thickening and induration of its structure, and the discharge of a large quantity of stringy mucus mixed with more or less pus and blood.

2. *Course and Consequences.*—*External Hemorrhoids* give rise, when first formed, to more or less inflammation, attended with a good deal of local distress, and occasionally a little sympathetic fever. In a few rare instances the inflammation proceeds to suppuration and the formation of abscess, which, upon being opened, is followed by a discharge of the coagulated blood along with the matter, and thus produces a spontaneous cure. Ordinarily, however, the inflammatory action subsides in a day or two, and the tumors, if let alone, undergo in the course of time, a very gradual but

material change in their structure. This change consists in the absorption of the watery and coloring matters of the effused blood, and the organization of its fibrin, by which means the tumors are very much diminished in size, lose their reddish or livid color, and their acute sensibility, and remain as permanent appendages to the margin of the anus, in the form of pendulous excrescences of a pale appearance and flabby consistence. It is not uncommon to find a row of these appendages encircling the anal orifice, where they may give rise to no inconsiderable annoyance by friction against each other and between the nates in walking, especially in hot weather. Sometimes in consequence of this chafing, and the want of cleanliness, they become the seat of most painful ulceration upon their inner or mucus surfaces, and are said also to occasionally degenerate into malignant disease; but of this latter I have never witnessed an instance.

Internal Hemorrhoids occasionally, but very rarely, undergo a spontaneous cure. This may take place in one or two ways: 1st. From negligence or some other cause, the tumors are not returned as soon as they should be, after defecation; inflammation is set up, the sphincter muscle becomes spasmodically contracted, and the protruded parts fall into a state of mortification in consequence of the strangulation. In this manner the whole of the diseased mass may slough off, and if the patient's constitution is able to bear up against this new malady, he will be permanently cured of the old. Two cases of this sort are reported by Mr. HOWSHIP, and one came to my own knowledge in an adjacent State not many weeks ago. In the second place, inflammation may, from some cause or other, be lighted up in the diseased part, attended with coagulation of the blood, and effusion of lymph, by which means the vessels are obliterated, and in the course of time the coagulated blood and effused lymph becoming absorbed, the tumors will be found to have entirely disappeared.

Most frequently, however, the disease, after having become quite bad, either remains stationary for some time, or progresses steadily from bad to worse, the tumors often attaining the size of a man's fist. Under these circumstances the suffering that they give rise to is very great. One individual with whom I am acquainted, and who has pertinaciously declined all surgical interference, is obliged to provide himself regularly every morning when he goes to stool, with towels, soft cloths, &c., for the purpose of cleanliness, and having emptied his bowels and washed the parts in cold water, has to get upon his knees and one hand, while with the other gradually effects reduction; and such is the sense of fatigue and exhaustion after the operation is over, that he has invariably to lie down for an hour or two before he recovers from its effects.

But the most serious consequence attending the disease, is the general anemia resulting from the frequent losses of blood. I cannot better describe this condition than by making use of the language of Mr. SYME.* "The patient loses flesh and acquires a remarkable paleness of complexion which is exchanged for a peculiar dingy yellow hue like that of imperfectly bleached wax. The lips no longer posses their vermillion color, but resemble those of a dead body; the tongue, too, has a blanched appearance very characteristic of the state induced by excessive or constant depletion. These symptoms are attended with great listlessness or want of energy, both of body and mind, disturbed sleep, irritability of temper, quick pulse and head-ache, which is generally increased by rising up more than by lying down.—Palpitation and pain in the region of the heart, and difficulty of breathing, are also frequently induced by slight exertion or agitation of any kind." And what is remarkable, these symptoms sometimes exist without the patient's knowledge of their true cause. A case of this kind came under my observation a few years ago, in which the individual ascribed his symptoms to disorder of the stomach. Although he had often noticed that his fœces were streaked with blood, and that blood appeared upon the paper with which he wiped himself, he was not aware that he was laboring under hemorrhoids, the tumors having never, to his knowledge, protruded at the the anus. Indeed, I may remark, that he had been treated for dyspepsia, and would in all probability have died under this impression had he not fallen into other hands, and been relieved of the real source of his difficulty. Mr. SYME also mentions a case of the same kind, in which "the patient was supposed to labor under disease of the heart, and whose waxy look, bloodless lips, and defective energy, together with irregular action of the heart, certainly afforded considerable ground for this opinion, but Dr. ALEXANDER discovered that there was an internal hemorrhoid which bled profusely every time the patient went to stool, and I removed it, with the effect of quickly restoring him to health.*"

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*Diseases of the Rectum.

3. *Causes.*—The causes of hemorrhoids are predisposing and exciting, of which the former are of more importance in the production of the internal, and the latter of the external variety. The *predisposing causes* are a relaxed phlegmatic temperament, luxurious living, indolent habits, disease of the liver or lungs, and an occupation requiring long standing. Of these I am inclined to think that the last mentioned is the most powerful, and it is, of course, doubly so when combined with one or more of the others. Space will not permit me to enter into an account of the manner in which these causes predispose to the occurrence of piles, but suffice it to say that they are not unfrequently the only assignable causes of the internal variety, but not of the external. The *exciting causes of external piles* consist exclusively of such things as interpose a sudden interruption to the return of the venous blood from the hemorrhoidal veins, as, for instance, violent efforts in evacuating the bowels or bladder, parturition, lifting heavy weights, &c. Their mode of action is very easily understood. The veins of the lower part of the rectum and verge of the anus are very numerous and tortuous,

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* Op. Cit.

and communicate on the one hand with the portal circle through the superior hemorrhoidal vein, which terminates in the inferior nusenteric, and on the other with the general venous system by a much smaller trunk, called the middle hemorrhoidal, which opens into the internal iliac. Now it is a fact known to almost every one, that in the contraction of the abdominal muscles the diagonal of all the forces is in the direction of the bottom of the pelvis, so that the contents of the abdomen are made to press forcibly upon those of the pelvis, and consequently upon these two venous trunks, but more especially the larger one. If this pressure occurs in an individual in whom, from predisposition or habit, the abdominal veins are in a state of unnatural fullness from want of tonicity, excessive alimentation or what not, one of two things occurs; either the hemorrhoidal veins smply dilate, or else one or more of them give way. In the latter case an effusion of blood takes place, constituting external hemorrhoids.

The exciting causes of *internal hemorrhoids* may be the same as those concerned in the production of the preceding variety, with some modification in their mode of action. Thus, as just stated, external piles result suddenly from over distension of the veins of the rectum, but for the production of the internal form it is necessary that this interruption should often recur before the venous radicles can be brought into a permanently dilated or varicose state. Where the interruption is habitual and occasionally very great, both forms of the disease are apt to be the result.

But there is another set of causes upon which some authors place no little stress, and which are no doubt very active. They consist of local irritations of any kind whatever, by which an unnatural amount of blood is determined to the rectum. The most common causes of this kind are the presence of foreign bodies and ascarides, riding upon horseback, the habitual use of drastic purgatives, more particularly aloes, other diseases of the rectum, such as chronic dysentery, ulceration, &c., and lastly diseases of adjacent parts, as, for instance, of the uterus and other genito-urinary organs. It is very easy to understand how such causes might induce the disease in a person already predisposed, and even when there is no very great predisposition, if the irritation have the effect of producing frequent and violent efforts at expulsion. In the latter case, however, the irritation would be properly considered as a predisposing, and the straining the immediate or exciting cause.

4. *Treatment.*—The treatment of hemorrhoids is palliative, radical and preventive; but as it differs very materially in the two varieties, a separate description becomes necessary.

External Hemorrhoids.—The *palliative treatment* of external hemorrhoids is called for only when a high degree of inflammatory action attends the disease, or when from fear of the knife an unwillingness to undergo the necessary exposure, or some other cause the patient refuses to submit to the radical treatment. It consists simply in the administration of a little cathartic medicine and the local application of cold water for a day or two, followed by some anodyne ointment to allay irritation and prevent friction in walking. A favorite prescription of many practitioners, and one that has been successively transmitted as a sort of professional heir-loom from one physician to another for several generations, is the comp. ointment of nut-galls, composed of equal parts of powdered galls, opium, and lard or simple cerate. The probability is that the great virtue that has been ascribed to this unguent resides more in the lard, which prevents chafing, than in either of the other ingredients. If the inflammation be very considerable, threatening suppuration, the case has to be treated upon the ordinary antiphlogistic plan.

The *radical treatment* is so simple, so satisfactory, and so universally applicable that it should be almost always insisted upon. It consists either in excision or incision. *Excision* is more particularly applicable to cases of long standing, in which the tumors are converted into fleshy appendages. It is performed by taking hold of the part with the fingers or a pair of forceps, and snipping it off at the base, with a pair of blunt pointed scissors. The operation is attended with intense but momentary pain, but rarely with hemorrhage. *Incision* is the proper operation in all recent cases. It is performed by plunging a sharp-pointed bistoury or an ordinary thumb-lancet into the interior of the tumor and cutting freely from within outward; or it may be just as easily performed with a common scalpel, cutting from without inward. After the incision is made, gentle pressure on each side will cause the clot of blood to roll out, generally in the form of a rounded shot or bullet-like mass. The only subsequent measures that are necessary are daily ablution in cold water, the application of simple cerate or lard to prevent undue chafing and the institution of the preventive treatment. I have never witnessed any hemorrhage after the operation beyond a few drachms, and indeed, generally only to the extent of a few drops; if, however, such an accident should occur, it could be easily remedied by the application of pressure or touching the part with a heated probe.

The *preventive treatment* of external piles consists, of course, in the avoidance of all predisposing and exciting causes, more especially the latter, of which a constipated condition of the bowels is one of the most important. To remedy this the patient should be directed to take a sufficient amount of out-door exercise every day; live principally upon gruel, molasses, stale bread, crackers, soup, and such other substances as are known to favor a liquid condition of the fœces; and, if necessary, the frequent and sometimes daily use of mild laxatives, such as sulphur-water, seidlitz powders, citrate of magnesia, extract of black-walnut, &c.

Internal Hemorrhoids.—The treatment of internal piles may also be divided into palliative, radical, and preventive.

1. The *palliative treatment* is applicable to a comparitively small number of cases, the majority admitting of radical cure. Where, however, there is serious disease of the liver or lungs, where the patient is very old,

and has been laboring under the disease a long time without any apparently bad effect upon the constitution, and in cases occurring in the latter months of pregnancy, palliation is all that should be attempted. The indications are to relieve, as much as possible, the pain attendant upon defecation, prevent farther increase of the disease and restrain hemorrhage, all of which may be fulfilled by the following means: 1st, an abandonment of all predisposing and exciting causes; 2d, the use of certain measures to keep the contents of the larger bowels in a liquid or semi-liquid state; 3d, attention to the mode of defecation; 4th, the local application of astringents.

It is hardly necessary to insist upon the first of these means, the removal of all predisposing and exciting causes. If the patient's occupation be one that requires long standing, it should be changed for a more active mode of life; if the constitution be relaxed and debilitated, tonics, a well selected but liberal diet, out-door exercise, &c., will be called for; if the individual has been accustomed to an idle, luxurious life, with intemperance in eating and drinking, this must be abandoned, &c., &c.

Attention to the state of the bowels is of very great importance, and the means pointed out in connection with the preventive treatment of external piles should always be put in practice.

The manner of emptying the bowels requires particular notice. One of the most powerful causes tending to keep up and increase either one of the varieties of hemorrhoidal disease, but more especially the internal, is the habit of stooping down at stool. This is probably oftener the case in the country, where the use of water-closets is so frequently dispensed with by men, but is also true in a less degree when apartments of this sort are resorted to, owing to an ill-construction of the seat. It is a fact well known to professional men at least, that the less the body is doubled up in the act of defecation, the less the straining or expulsive effort, and consequently the less apt there is of protrusion of hemorrhoidal tumors, if these exist. This is a very important consideration, for the oftener and greater the protrusion the greater the liability to an increase of the disease, and the more exposed the individual is to hemorrhage and pain. The patient should, therefore, be made to pass his fœces either in the recumbent, or as nearly the erect posture as possible. The latter is more convenient, and less disagreeable to one's sense of decency, and may be accomplished by having a privy constructed with the seat high, say nearly upon a level with the buttocks, and inclining from behind downward and forward, at an angle of about forty-five degrees. Indeed it would be a good precaution for all persons predisposed to this disease to make use of a privy constructed upon this plan. It is a matter too little thought of, but not the less important on that account.

The fourth consideration is the local use of astringents. These are most conveniently employed in the form of washes, in which the parts may be bathed after defecation, or which may be injected into the bowels once or twice a day. For the former purpose the individual should provide himself with a basin of cold water every time he goes to stool, and, when the act of defecation is finished, bathe the parts by sitting over the basin and dashing the water upon them, and then carefully return them. If something more astringent is required, a little alum, or tannin, or sulphate of zinc may be dissolved in the water, or a decoction of oak-bark used in its stead. In cases where the tumors do not protrude, the bowels should be washed out by one or other of these substances after every operation. Occasionally great good is accomplished, and it is said that cases have been cured by injecting into the rectum at night just before going to bed, a small quantity of some powerful astringent, and allowing it to remain in contact with the parts as long as the patient can retain it. For this purpose nothing is better than a strong solution of tannin, or alum, or a dilute solution of muriated tincture of iron.

Medicines given by the mouth are sometimes employed in the treatment of internal piles. Of these the compound confection of pepper, commonly called *Ward's paste,* has obtained a very extensive reputation. Sir B. Brodie, than whom there is probably no better authority in surgery now living, thus speaks of it. "There is a medicine that is very often useful in cases where simple expedients fail, namely, the *confectio-pepiris composita,* which is similar to what was once very celebrated as Ward's paste. It is like eating coarse ginger-bread; it may be a little disagreeable to be taken, but still it may be taken easily enough; and the patient must persevere in its use for a considerable time. Very severe cases of piles are sometimes cured by it. A lady came to me with one of the worst cases of this disease that I ever saw; the piles were so large, and protruded so constantly, that I did not think there was any chance of curing her, except by the operation hereafter to be described, and I advised her to submit to it. She said the piles made her miserable, and she should be very glad to be cured on any terms, but she was compelled to pay a visit in the country which would render it necessary to delay it for a month. I thought the delay for a month could not hurt her, and under these circumstances I recommended her to give Ward's paste a trial, and see what it would do for her. I heard nothing more of her for six or eight weeks, when she came back, and said she was happy to inform me that she had taken the paste regularly and was now quite well. * * * * How does the Ward's paste operate? It is evident that, except any small portion which may be digested, it passes into the colon and must become blended with the fœces; and I suspect that thus coming in contact with the piles, it acts upon them as a local application, much as *vinum opii* would act upon the vessels of the conjunctiva in chronic opthalmia." Mr. Brodie also mentions a case of Sir E. Home's in which the paste was, by mistake, introduced in large quantity into the rectum with the effect of curing the patient.

When internal piles from any cause whatever become inflamed and swollen, the treatment for the time being is necessarily directed to subduing the excited action. This accident generally occurs when the tumors are protruded, and the first thing to be done in a case of this kind is to attempt to return them, which is done by first gently pressing the blood out of them, and then pushing them up. Subsequently the application of leeches around the anus and the injection of cold water is in general all that is necessary. If, however, the efforts to reduce them prove unavailing, the only thing that can be done is to puncture them with a sharp-pointed bistoury, and apply cloths wrung out of warm water, and then make another attempt to return them; if still unsuccessful, the probability is that mortification will take place, which should be treated in the same manner as mortification in any other part of the body. As heretofore stated, if the patient's constitution is able to sustain this morbid action, a cure of the original disease is the result.

2. *Radical Treatment.*—For the radical cure of internal or varicose piles, one of two things is necessary; either the tumors must be removed by an operation, or obliterated by the coagulation of their contents and the effusion of lymph. Removal may be effected by the application of caustics, by excision, or by the ligature; coagulation and adhesive inflammation, by the seton, acu-puncturation with hot needles, or injection of irritating fluids.

Caustics.—The old practice of destroying hemorrhoidal tumors by the actual cautery, vienna paste, or caustic potash, is pursued by very few intelligent surgeons of the present day, and should indeed be looked upon as an almost obsolete procedure. Indeed, the only distinguished exception that I know of, is the present Baron BOYER, of Paris, who is in the constant habit of using the hot iron in the treatment of this disease. A modification of the caustic plan, however, has been put in practice by Mr. HOUSTON, of Dublin, and occasionally also employed by other surgeons with sufficient success to warrant its adoption in cases in which, for some cause or other, the ligature is contra-indicated. It consists in the repeated application of strong nitric acid to one or more of the tumors at a time, for the purpose, not so much of producing a slough, as of exciting a moderate degree of inflammation and consequent coagulation of the contained blood and effusion of lymph. It belongs, therefore, more properly to the second class of remedies mentioned above. The acid should not be applied to more than two or three of the tumors at once, and not over their whole surface, but only to the extent of about a five-cent piece, and should be immediately followed by a free inunction of the parts with sweet oil or lard, to prevent its contact with the surrounding structures. The application has generally to be repeated from three to five times, with an interval of five or six days between each, and requires no little caution in its management. I have had no experience with it myself, but Prof. GROSS informs me that he has employed it once and with the most satisfactory result.

Excision.—At the present day excision of internal hemorrhoidal tumors is practiced nearly exclusively by the French surgeons, the operation having been almost entirely abandoned in Great Britain and this country. And considering the seat and nature of the disease, it seems to me exceedingly strange how any intelligent and honest surgeon can conscientiously advise a patient to submit to so hazardous a procedure—except in a few rare cases—when other and less dangerous means have proved so much more successful. The great danger, as the reader will of course understand, is hemorrhage; but to what extent this accident has proved fatal it is impossible to ascertain, as surgeons generally, and more particularly those of France, where, as just stated, this operation has been most extensively employed, are not in the habit of making public their unsuccessful cases of any kind; a fact that can not be too much regretted in view of the great benefit that such reports would undoubtedly confer upon the profession. That fatal effects however, from this cause have frequently followed the operation, we have some of the best authority for believing. Thus honest old BOYER, in his immortal work entitled "*Traité des Maladies Chirurgicales*," states that instances of this kind have been frequently reported. His son, Baron PHILIP BOYER, admits the loss, from this cause, of one patient out of sixteen upon whom he performed the operation, also one from tetanus, and three others who, to use his own language, "*succumbèrent à l'adynamie qu'avaient préparée les pertes abondantes de sang*,"—in all, five cases out of sixteen. J. L. PETIT tells of a young surgeon who imprudently extirpated some hemorrhoidal tumors, which he supposed to be external but which proved to be internal. Frightened by the violent hemorrhage he plugged the rectum with charpie, and no blood being thus allowed to escape externally, he thought he had arrested it; but the patient died and PETIT found the rectum and nearly the whole of the colon full of semi-fluid venous blood. Sir ASTLEY COOPER says, that in the early part of his career he was a strong advocate for excision, but was ultimately induced to abandon it from having met with three fatal cases, two of the three resulting from hemorrhage, and the other from peritoneal inflammation. And it is worthy of remark that in each of the cases that died from hemorrhage, but a single tumor was cut off. Sir BENJAMIN BRODIE, although not as unfortunate as to lose any of his patients, records his entire experience in this operation as follows: "In the first one or two cases I found no inconvenience to arise from my altered practice, (referring to his adoption of excision for the ligature;) but then a case occurred in which the patient lost a great deal of blood; in another case the hemorrhage was so great that the patient nearly died; and then a thirdcase occurred, in which also the patient lost an enormous quantity of blood—so much, that I now only wonder he did not actually die." DUPUYTREN records several cases occurring in his own practice in which the hemorrhage was very alarming, but, Frenchman-like, he was not to be deterred by a little accident of this sort from continuing his favorite practice, only he took the precaution ever afterward, when he thought there was any danger, of touching the cut surface with the actual cautery.

Looking therefore at the situation and morbid anatomy of internal hemorrhoids, and at the frequent, alarming and often fatal effects of extirpation by excision, it is my honest opinion that the operation ought to be almost entirely discarded from surgery. Occasional cases occur, it is true, in which it may be very safely employed; cases, for instance, in which the tumors have become solid from coagulation of their contents or adhesive inflammation; but even here I think it preferable to let nature accomplish the work by gradual absorption, promoting this process by the local application of stimulants or the introduction of the rectal bougie.

Ligature.—The employment of the ligature for the radical cure of internal piles dates back as far as the time of the great father of medicine, the immortal HIPPOCRATES, and it is at this day, *par excellence*, the operation. It is just as effectual as excision, and has the great advantage over the latter in being entirely free from the danger of hemorrhage. The great disadvantage that attaches to it is the acute pain by which it is often attended and followed, while, in respect to other accidents, more particularly peritoneal inflammation, there is probably little or no difference between it and excision.

Before proceeding to describe the mode of performing the operation, it is necessary to state the principal circumstances under which it should not be resorted to. 1st. It should not be employed in patients debilitated and broken down in constitution by old age, unless life be seriously threatened by profuse hemorrhage. 2d. In persons laboring under organic disease of the lungs, heart, or liver. 3d. In women during gestation or immediately after parturition. 4th. In cases where there is no protrusion and no serious hemorrhage, until the simpler means stated under the head of paliative treatment have been fairly tried. 5th. In periodic cases of vicarious of the catamenial discharge until this later function has been re-established. 6th. In cases where the tumors are in a state of inflammatory engorgement; and lastly in no case where the system has not been properly and carefully prepared.

The last mentioned point is one to which I desire to call particular attention. No patient laboring under this disease, no matter how healthy he may be in every other respect, should be subjected either to excision or ligature without more or less preliminary treatment. The kind of treatment and the length of time required will, of course, vary in different cases. If the individual be of a plethoric habit of body, accustomed to a full, luxurious diet, and of an active, energetic temperament; a restricted diet, occasional purgation, and partial confinement to the house for ten days or two weeks, will generally accomplish all that is required. If, however, the patient, as is generally the case, be of a relaxed, phlegmatic temperament, debilitated and broken down either by intemperance, dyspepsia, frequent losses of blood, or any other complaint of long standing, a resort to ferruginous tonics, a liberal, well selected allowance of food, gentle out-door exercise, &c., will become necessary, and should be continued until a tolerable healthy tone of action is established, even if it should require several weeks or months. But should there be daily loss of a considerable quantity of blood, which cannot be restrained by local astringents until the requisite state of system is produced, the operation may have to be performed at all hazards. But as a general thing the practitioner should make it an inviolable rule always to institute a systematic course of preparation before undertaking the radical cure by either of the methods stated.

The preliminary treatment having been continued as long as may be judged necessary, the night before the day proposed for the operation, the patient should be required to take a dose of cathartic medicine, as for instance, the common compound calomel pill, followed early the next morning by half a pint of citrate of magnesia, or a table-spoonful of epsom salts. After the medicine has produced three or four tolerably copious stools he should take three quarters of a grain or a grain of morphia, to be repeated in the course of an hour or two if necessary, to put the bowels completely at rest. When this is accomplished he is ready for the operation.

Operation.—The surgeon having provided himself with four or five stout silk ligatures, which should be well waxed to prevent slipping, a tenaculum, a pair of scissors, and a competent assistant, requests the patient to make violent expulsive efforts over a vessel of warm water, in order to protrude the parts as far as possible. When this is done he places him upon the floor upon his knees and elbows, inserts the tenaculum through the largest of the tumors as near the sphincter as my be, and makes gentle traction upon the instrument to steady and draw the tumor out as much as possible without lacerating it; he then commits the tenaculum to the charge of the assistant, encircles the tumor with the ligature beyond the convexity of the instrument, and ties a firm unyielding knot. In this last mentioned procedure some care is required, lest the ligature be drawn so tightly as to divide the tissues; the object is not to cut the tumor off but to strangulate it, and for this purpose, although the thread has to be drawn very firmly, the surgeon should be on his guard not to go beyond the mark. The ligature having been tied, one or both ends may be cut off within a short distance of the knot, although I think it preferable that one should be left hanging out at the anus.

The number of tumors to be tied will vary in different cases, although, as a general rule, three or four will suffice. There is no necessity for tying all of them; usually about two thirds or three fourths of the whole number are enough; the remainder will become obliterated by the effusion of lymph consequent upon the inflammatory action, which necessarily follows the operation.

After all the ligatures have been tied, and one end of each cut off, the parts should be returned very gently, and the patient put to bed. If much pain is complained of, another grain of morphia will be required, together with the local application of cloths wrung out of cold water, or, what is often more agreeable to the patient's feelings, a bottle of hot water placed between the thighs and pressed up in contact with the anus. As a common rule it is advisable to administer a full opiate immediately after the operation, whether there be much pain or not, and to continue its use in sufficient quantities to keep up a state of slight narcotism for three or four days; it insures perfect quietude of the bowels—a point very much to be desired—controls inflammatory action, and is the safest possible guaranty against the occurrence of peritonitis. The bowels should on no account be allowed to act under four or five days at least, to prevent which, in addition to using the morphia or other preparation of opium, the patient should be subjected to a rigorous diet, consisting only of a little mush and milk, chicken broth, crackers, or other bland, unirritating articles. At the end of this time a saline cathartic may be given, aided by large injections of warm water, and after free evacuation the morphia should be again resorted to for three or four days, and again a gentle cathartic. At the end of a week or ten days, if every thing is favorable, the opiate may be suspended, the bowels kept gently open by the use of sulphur water, citrate of magnesia, or some other mild laxative, and the patient allowed to sit up from time to time throughout the day.

Most of the ligatures accompanied by more or less clotted blood, the debris of the strangulated tumors, and a considerable quantity of stringy mucus, are usually discharged with the first evacuation of fœcal matter, if this has been delayed for six or eight days. If any should remain longer than this time, gentle traction may be made daily upon the ends hanging from the anus, but not sufficient to endanger laceration or to produce pain; this will promote their detachment and they will generally be discharged a day or two thereafter. Another circumstance which occurs at this first and often at several subsequent evacuations of the bowels and well deserves to be mentioned, is the re-protrusion of the parts in apparently as bad a condition as ever. This very naturally alarms the patient, and may lead the inexperienced surgeon to suppose that the operation has been entirely unsuccessful; but it need not, for it results simply from the congested and œdematous condition of the parts resulting from the inflammation, and will gradually disappear in the course of ten days or two weeks. During this period, the patient is also liable to suffer from more or less strangury which should be alleviated as much as possible by cloths wrung out of warm water applied over the hypogastrium, the free use of diluent drinks, or mild unirritating diuretics, aided if necessary, by an occasional injection of starch and laudanum, or a suppository of opium. If violent tenesmus, accompanied by constitutional irritation, should occur in spite of the internal use of morphia, it may become necessary to apply six or eight leeches around the anus, or even to take blood from the arm; but very generally an injection of cold water to wash out the lower bowel, followed by the laudanum and starch above directed, is all that is required.

When the tumors are very large, it has been advised to make use of a large curved needle armed with a double ligature, and carried through the base of the tumor, so that the two threads may be tied on opposite sides, each encircling only one half of the swelling; but this, I imagine, is rarely necessary. Under these circumstances a part only of the tumor need be ligated, following the plan already described, for the unembraced portion is almost sure to be obliterated by the subsequent inflammation.

Almost the only, and certainly the greatest danger to be apprehended from the application of the ligature to internal hemorrhoids, is peritoneal inflammation. This, however, is comparatively a rare occurrence, especially if the patient's system has been properly prepared for the operation, and opium or morphia freely employed as heretofore advised. If this accident should happen, it should be treated upon the general principles, which are familiar to all practitioners. The great remedy, however, in my opinion, is opium or some of its preparations, given to the effect of partial narcotism, and kept up for several successive days.

In regard to the other modes, namely, the seton, introduction of hot needles, &c., proposed for the radical cure of internal hemorrhoids, I know nothing, nor do I believe that they have ever been put in practice. I mention them simply because they are applicable to varicose tumors occurring in other parts of the body, and might properly be employed here in very bad cases in which the surgeon wished to make use of milder means before resorting to the ligature.

The *preventive treatment* of internal hemorrhoids is demanded in persons who, from constitution or occupation, are predisposed to the disease, and in all cases after a cure has been effected. It is a well known fact that the disease is very apt to recur in persons who do not take the necessary precaution, and to all who have been so fortunate as to be relieved, this is especially necessary. The means to be made use of are those pointed out under the head of *palliative treatment.* The most important of these is a removal from all predisposing causes, a constant attention to the state of the bowels, and the use of a properly constructed water-closet.—*Western Journal of Medicine and Surgery.*

Louisville, July 31, 1854.

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, NOVEMBER, 1854.

HUMAN PHYSIOLOGY: *Designed for Colleges and the Higher Classes in Schools, and for General Reading.* BY WORTHINGTON HOOKER, M. D. *Illustrated by nearly* 200 *Engravings. Published by* FARMER, BRACE & Co., *New-York*: *pp.* 389.

After a careful examination we are free to say, we consider this an excellent work, and well adapted to the purposes for which it was written.

Of late years several books of a like character have been published, all of which have more or less merit, and between which we have no desire to make invidious distinctions.

The study of Human Physiology in Academies and Common Schools is among the new notions of the day, and well would it be for the human race if all the so called progressive movements were as free from reasonable objection as this.

Surely, no nobler study can engross the attention of an enlightened people than to know the laws which govern their own organization, and on which their existence depends.

If life is of value to its possessor, every other occupation is subordinate to the preservation of that life, without which this human frame is a mere mass of inert matter. And no one who is ignorant of the laws through which he lives, moves, and has his being, can be at all prepared to shun the thousand baneful influences which flow "thro' this air, this ocean, and this earth," and continually threaten to stop the operations of this complicated machine which constitutes the house we live in.

And if this knowledge is necessary or advantageous, there is no so proper time for its acquisition as in youth, when the mind is being developed, and acquiring information for use in after life,

We claim that the study of Anatomy and Physiology in our Common Schools will be the most powerful remedy for the medical quackery which is at present exerting so ruinous an influence on society, and sending so many to an untimely grave.

With this view we hail with gladness the appearance of new books of this class; for, being a comparatively new field, no one can expect that the books heretofore published are nearly perfect, but that, as in other branches of popular education, new modes of teaching, and different arrangement and manner of illustration, will be developed in each succeeding year.

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ELKOPLASTY: *or Anaplasty applied to the Treatment of old Ulcers. Also,* A NEW MODE OF TREATMENT *for Delayed or Non-union of a Fractured Humerus.* BY FRANK H. HAMILTON, M. D., &c.

Prof. Hamilton has here detailed a case where he has succeeded in healing an extensive old ulcer of the leg by a plastic operation. He gives the following as his conclusions in relation to these ulcers and this operation:

> "SUMMARY. 1st.—Ulcers, accompanied with extensive loss of integument, do generally refuse to heal, whatever may be the health of the body or of the limb.
>
> 2d.—Anaplasty will sometimes succeed in accomplishing a permanent cure, and especially where the health of the body and of the limb are perfect, and where, by inference, the refusal to heal is alone attributable to the extent of the tegumentary loss.
>
> 3d.—The graft must be brought from a part quite remote; generally from an opposite limb, or from another person.
>
> 4th.—If smaller than the chasm which it is intended to fill, the graft will grow or project from itself new skin to supply the deficiency.
>
> 5th.—It is not improbable that the graft will expand during the process of cicatrization at its margins, but especially for a time after the cicatrization is consummated.
>
> 6th.—In consequence of one or both of these two latter circumstances, it will not be necessary to make the graft so large as the deficiency it is intended to supply."

The "New mode of Treatment" for non-union of a fractured humerus is founded on the belief of Prof. H., that the false joint is produced, not so much because there is motion at the seat of fracture, (which he shows is not apt to hinder union of fractures in other bones) as because the motion in case of fractured humerus, instead of being that of one fragment *upon* the other, as on a pivot, is, (by reason of the stiffened condition of the elbow, making that the pivot,) rather a continued motion of the upper end of the lower fragment, "to and from" the lower end of the upper.

He claims that it is this continued motion of one fragment to and from its fellow which prevents the union, and which he proposes to remedy by "straightening the fore-arm upon the arm, and confining them to this position. A straight splint, extending from the top of the shoulder to the hand, made of some firm but moulding material, and made fast with rollers, will secure the requisite immobility to the fracture. The weight of the fore-arm and hand will only tend to keep the fragments in place, and if the splint and bandages are sufficiently tight, the motion occasioned by swinging the hand and forearm will be conveyed almost entirely to the shoulder joint. Very little motion, indeed, can in this posture be communicated to the fragments, and what little is thus communicated is a motion which experience has elsewhere shown not disturbing or pernicious, but a motion only upon the ends of the fragments, as upon a pivot."

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They have in press, HUMAN HISTOLOGY, IN ITS APPLICATION TO PHYSIOLOGY, AND GENERAL PATHOLOGY. BY EDMUND R. PEASLEE, M. D.

New Hampshire physicians will be on the look out for its appearance, as they have long felt that they may depend on the investigations and deductions of Prof. P., as accurate, truthful, and logically correct.

ON COUGH IN GENERAL, AND ON HOOPING-COUGH IN PARTICULAR.

By Dr. R. B. Todd, F. R. S., *Physician to King's College Hospital, London.*

[Cough is "a sudden convulsive expiratory effort." Irritation of any kind upon the pulmonary mucus membrane will produce *cough*;—irritation of the nasal mucus membrane will produce *sneezing*, another expulsive effort. It should be observed, that the nasal branch of the mucus membrane is supplied by sentient branches of the fifth nerve, while the pulmonary surface is supplied by branches of the vagus; and it has been proved that irritation of the vagus, in any part of its course, will produce cough similar to that which occurs in any disease of the respiratory organs.]—*Braithwait's Retrospect.*

A common cause of cough—indeed a much more common one than is generally supposed—depends on irritation of the pulmonary branches of the vagus, consequent on the pressure exerted on them by enlarged bronchial glands. Tumors, also, of various kinds, are capable of exciting cough in a similar way, and the development of tubercles in the lungs may produce the same effect. Aneurisms not unfrequently give rise to a cough, which may baffle us in our endeavors to account for its production; and, indeed, cough is often a very important symptom in the diagnosis of aneurism, and one from which we frequently derive assistance in localizing the disease. An aneurismal tumor may press upon the branches of the vagus distributed to the trachea and bronchia, and thereby excite the most severe paroxysmal cough. Of this there is an excellent example now in Fisk ward. The patient is a man who was admitted for cough of this character. We carefully examined his chest, without being able to discover any indications of disease in the lungs; but at length we obtained evidence of the existence of an aneurismal tumor, which, most probably, by pressing upon some branches of the vagus, excited the violent cough, that constituted so prominent a feature in the case.

So, again, inflammatory ulceration of the trachea, whether primary or secondary, resulting from the pressure of an aneurismal tumor, especially about its bifurcation, where there are many branches of the pulmonary nerves, may cause a very distressing cough.

Thus, then, in reviewing the various circumstances under which cough may occur, you may enumerate the following kinds of this affection: 1st. The throat cough, the exciting cause of which may be either in the fauces or in the larynx. 2d. The tracheal or bronchial cough, when the trachea or primary bronchi are the irritated parts. 3d. The pulmonary cough, when the smaller ramifications of the bronchial tubes or the lungs are the seat of the irritation. 4th. Practical men will admit, I think, the existence of a cough dependent on gastric irritation; and, lastly, in persons of highly nervous temperament, there is the nervous cough, which, in most instances, is no more than a convulsive affection of the throat muscles.

Of these forms of cough, those which most frequently come under our observation are, the throat cough and the pulmonary or lung cough. Both are very prevalent at this time of the year. The former is the common cough of ordinary colds, and may be readily distinguished by the absence of all abnormal phenomena, connected with the breathing sounds, and by the swollen and red condition of the mucus membrane of the fauces, and more or less of hoarseness. In more chronic cases, this membrane is less or not at all swollen, and assumes a dusky red hue and a lax condition. Coughs of this kind are repeatedly mistaken and treated for pulmonary coughs, and the patients condemned to take large quantities of nauseous drugs; whereas many of them are easily curable by local treatment. This kind of cough is often exceedingly violent and distressing, and it is not generally accompanied by any other sputa than throat mucus and saliva.

The more common form of lung cough is that which attends bronchitis. This occurs generally in paroxysms; it is accompanied with expectoration, which is the more abundant in proportion to the extent and severity of the bronchial affection. We find it likewise in connection with tubercular or other disorganization of the lungs, and the more severe in proportion to the extent of pulmonary destruction and consequent bronchial irritation. Under these cicumstances, an expectoration, generally copious and purulent, follows the cough; and, indeed, the presence of this matter in the bronchial tubes very frequently aggravates the cough. Another form of lung cough is short and dry, or accompanied by little or no expectoration, and apparently kept up by some permanent irritant in the lung's substance, as crude tubercles scattered among the bronchial ramifications. Such a cough is a common precursor of confirmed phthisis, or, more correctly, an attendant on its early stages.

Such are the ordinary causes and forms of cough.

Hooping-cough.—There is yet one other form so peculiar and characteristic, constituting as it does, not alone a symptom, but in truth a disease. The hooping-cough, so called from its peculiar final whoop, which is a sign that the patient is again taking breath, is not often brought under our notice in the wards of an hospital. It is much more common among the out-patients of an hospital than among the in-patients.

Passing over the history and symptoms of the disease, for which we have not room, Dr. Todd proceeds:

Hooping-cough, then, as far as present knowledge enables us to speak, is a disease which runs a certain course, can be communicated from one person to another, and is probably due to the influence of a poison which gets into the system, and produces its local manifestations on the vagus nerve. It is not an inflammatory affection of any part, being simply dependent on a morbid state of the blood, caused by the introduction into it of some poison from without; and whatever inflammations may occur in the course of it must be regarded in the light of complications of the disease.

Treatment.—Having advanced this view of the nature of the disease, let me make a few observations upon its rational treatment, as founded upon these opinions.

Assuming hooping-cough to be a disease depending on the presence of a morbid poison in the blood (which is the most reasonable view of its pathology,) to cure the affection perfectly, we ought to find an antidote for the poison which produces it. If we could find some material which, when introduced into the system after it had received the poison, would neutralize that poison, then we should have the same power over this malady as we now possess over intermittent fever, which as you know, is also a paroxysmal disease, depending on the presence of some morbid poison in the system, and for which an antidote has been found in bark. But since, unfortunately no antidote for hooping-cough has as yet been discovered, it should not be our practice to look on in silence, and let the patient cough it out; but our aim should be to find the means of guarding him against the bad consequences of the cough, and to protect him from all those complications to which I have referred.

As the disease does not consist in an inflammatory condition of any part, we may at once dismiss all so called antiphlogistic plans of treatment. The plan, indeed, has had a fair trial; and if it had any real power over the disease, we should have long ere this accumulated abundant evidence to prove its superiority. The tendency of all the usual antiphlogistic measures is to weaken the nutrition of the lungs and the nervous system, and to impoverish the blood; to reduce the quantity of its coloring matter, to favor the accession of convulsions, and by the watery parts of the blood filtering through the walls of the blood-vessels, to promote the tendency of hydrocephalous.

The first point in the treatment is, carefully to guard the patient against the occurrence of bronchitis and pneumonia, as complications of the disease. Now, there is nothing which is so fertile a cause of bronchitis, as the admission of cold air to the bronchial mucus membrane. Consequently the patient should be kept in a well-regulated temperature; if his illness occur in the winter, he should stay in a roomy, well-ventilated apartment, which is not too warm, but of a uniform heat. He should be kept in this apartment, and not allowed to run about the house into rooms, or upon lobbies or staircases, which must present great variety of temperature. Early and close attention to the maintenance of a uniform temperature of the atmosphere in which the child resides, may save much subsequent mischief.

The second point is to uphold the general nutrition—to keep the patient well nourished. I do not mean that the patient thould be crammed or over fed, but that his diet should be well regulated, and sufficient food of all kinds supplied, not only to satisfy the appetite, but also—and what is far more important—the real wants of the system. On this account, I object to keeping children in this disease without animal food, as some so much insist on, though why they do so I cannot tell; for meat, in regulated quantities, and properly masticated, is more easily digested than almost any thing else; and it differs from all other alimentary substances, in the fact that its digestion consists in a simple process of solution in the stomach.

Another practice which exercises a most favorable influence on the nervous system (and it is this that we must look to after all,) is sponging the chest with *cold water* once or twice a day. The parents of weakly, delicate children often object to this plan of treatment; but by ordering a little spirit to be mixed with the water, you not only may overcome their scruples, but in giving a stimulating quality the application increases its efficacy. The sponging of the back and front of the chest, night and morning, exercises a bracing and tonic influence on the nerves, and in this way often acts very beneficially in this disease. Spiritous embrocations often do good in a similar manner.

In a large number of cases, one can get on very well without having recourse to drugs. Those which you will find most useful, and which I would recommend to your notice, as sedative antispasmodic remedies, in virtue of the power which they possess in allaying irritability of the nervous system generally, such as the various preparations of opium and belladonna. The non-nauseating expectorants, such as chloric ether, ammonia, and perhaps senega, may be also used; and astringents, to check excessive bronchial secretion, such as alum, sulphate of zinc, tannic and gallic acids, are sometimes necessary. But you must bear in mind, that such remedies should be used with caution, especially opiates, which in infancy and childhood are at all times to be given with great care, and more particularly if the lungs have become congested. The drugs which I would recommend you to avoid, are those which have a depressing and lowering tendency, such as tartar emetic and ipecacuanha. Many children, I am quite satisfied, while suffering from hooping-cough, have died from the too free and slovenly exhibition of these emetics.

If I had an opportunity of treating hooping-cough on a large scale, I would, in cases in which the paroxysms are very frequent and very severe, and when, as yet, the lungs are free from congestion, but not otherwise, give a fair trial to the careful inhalation of chloroform, with the view of endeavoring to cut short the paroxysm. We know that we can arrest the paroxysm of asthma in this way; why, then, should we not be able to do the same with that of hooping-cough. I have also known laryngismus stridulous relieved by the use of chloroform; and it is now well proved that other convulsions of children may be checked by its means.

In the cases of delicate children, where there is great reason to fear that damage may be done to the lungs by the cough, this practice may prove very useful. But with reference to the administration of chloroform, this fact should always be borne in mind, and it cannot be too frequently reiterated, that due provision should be made for the simultaneous free admission of air, along with the vapor of chloroform. There is no point upon which some men seem to be more foolhardy than on this one; and it is by the neglect of attending to this, that the reputation of one of the most valuable remedies that has ever been applied to the relief of human suffering may be seriously damaged. I do not advise you to give chloroform so as to produce its full effect; it may be inhaled in small doses of ten or fifteen minims, which may be repeated at intervals, according to the severity of the paroxysms. When children are already in an exhausted and very depressed state, chloroform ought to be administered by inhalation, or it should be given only in the smallest quantities.

Another remedy in the treatment of hooping-cough, to which I should very much like to give a fair trial, is the application of cold water on the splashing plan, two or three times daily, with or without the inhalation of chloroform. Such a practice must be pursued with proper precautions, first, to maintain a warm temperature of the room in which it is done; and, secondly, to have the water thrown over the child rapidly, and not so as to wet the head. To let the back and chest receive the brunt of the splash. These measures combined would tend to diminish the severity of the paroxysms, ward off the occurrence of bronchitis and pneumonia, as complications of the disease, promote the general nutrition, stimulate the nervous system, and thus protect the patient from the damaging effects of the cough.—*Med. Times and Gaz. March* 4, 1854, p. 203.

OBSERVATIONS ON SOME OF THE REMEDIAL POWERS OF THE SIMABA CEDRON, *and on its Employment in Intermittent Fever.* BY S. S. PURPLE, M. D.: *pp.* 16.

Dr. Purple has made some very careful and accurate observations on the effect of this remedy on cases of intermittent fever, which he has detailed with much candor, and concludes as follows:

"FINALLY.—From the declared experience of various observers of the medicinal effects of the Simaba Cedron, we are warranted in drawing the following conclusions regarding its therapeutic action:

That it possesses decided anti-periodic properties, and is therefore applicable in the treatment of periodic diseases.

That it is less likely than quinine to produce the aggregate of encephalic or neuropathic phenomena, induced by overdoses.

That it may, in large doses, repeated often, produce griping of the bowels, and even diarrhœa; but that these conditions are easily controlled by appropriate medicaments.

That, as a remedy in intermittent fever, it possesses properties, in many respects, equal to quinine, and in most cases is equally adapted to the curation of this disease.

That, in the treatment of yellow fever, it does not appear to possess any particular advantages over quinine, but, nevertheless, is equally well adapted to fulfill the indications which call for the use of this latter remedy.

That it possesses marked tonic properties, and deserves a prominent place in this classification of the Materia Medica.

That in chronic dysentery, diarrhœa, dyspepsia, and all states of the stomach accompanied with impaired or difficult digestion, its use will be found to be attended with benefit.

That, should a demand arise for its use in medicine, it is believed that it will be found not difficult to obtain a supply, in quantities sufficient to afford it at a much less price than quinine."

Treatment of Urticaria. By Dr. G. Budd, F. R. S.—When nettle-rash is brought on by eating some substance in common use, and occurs frequently, the offending substance may sometimes be detected by the plan followed by Willan. He says: "I have desired several persons affected with chronic urticaria to omit first one and then another accustomed article of food or drink, and have thus been frequently able to trace the cause of the symptoms. This appeared to be very different in different persons. In some, it was malt-liquor; in others, spirit, or spirit and water; in some white wine, in others vinegar; in some fruit, in others sugar; in some fish, in others unprepared vegetables. I must, however, confess, that several cases have occurred to me, where a total alteration of diet did not produce the least alleviation of the complaint."

It sometimes happens that a nettle-rash, resulting from defective digestion, is brought on not merely by some substance, but by several substances in common use; and it is then very difficult to detect the offending substance or to prevent the disorder by any restriction of diet to which the patient will submit.

In such cases, the disorder may sometimes be prevented by giving daily, immediately before dinner, or before breakfast and before dinner, a pill containing three or four grains of rhubarb; or what is still more effectual three or four grains of rhubarb, and from half a grain to a grain and a half of the powder of ipecacuanha.

I several years ago learnt the occasional efficacy of rhubarb given at such times, from a lady who told me that she was harrassed by frequent recurring nettle-rash for many years, and consulted many physicians, and tried various remedies in vain, until some person, who had suffered in the same way, advised her to eat a few grains of rhubarb every day, just before breakfast and just before dinner. She followed the advice, and was freed from the nettle-rash. After some time she left off the rhubarb, and the nettle-rash returned. She took the rhubarb again, and the nettle-rash again disappeared. This experiment she often repeated at distant intervals, and always with the same result. When she gave me this account, she had continued the practice of thus eating rhubarb for several years, with the occasional intermission of a few days, by experiment. She had a persuasion that if she then left off rhubarb, the nettle-rash would recur.

Small doses of rhubarb and ipecacuanha are, as I have before observed, often of service, where, from slowness of digestion, a sense of weight and oppression at the stomach is felt for some hours after meals, and seem to quicken and strengthen digestion by increasing the flow of gastric juice.

While taking these medicines, the patient should endeavor to strengthen digestion by exercise and fresh air; should be careful not to eat too much at a time, or too often; and should live on a very simple diet—avoiding spirits, and cheese, and pastry, and undressed vegetables, and in particular, those substances which have an especial tendency to bring on nettle-rash.

It sometimes happens, especially in women, that the nettle-rash, though depending immediately on the stomach, occurs only when digestion is weakened by over-fatigue or anxiety or some other mental emotion, or by profuse monthly discharges, and that remedies of a different class are availing.

In some cases, where all the means of which I have before spoken, had failed, I have known the eruption disappear under the use of carbonate of ammonia, alone or in conjunction with tincture of gentian.

Serpentaria is another remedy that has obtained some repute in the treatment of this disorder, but I have never made trial of it.

I may as well observe here, that an excellent application for allaying the irritation of nettle-rash, whatever be its cause, is a lotion made by mixing ʒss of acetate of lead and ℥ss. of tincture of opium with ℥viij. of water.—*Medical Times and Gazette.*

SUBSTITUTE FOR DOVER'S POWDER.—Dr. Tully, formerly Professor of Materia Medica and Therapeutics in the Medical Department of Yale College, some years ago introduced an anodyne diaphoretic powder, designed as a substitute for the compound powder of ipecacaunha, which is prepared as follows:

℞ Morphiæ sulphatis, gr. ij,
Pulveris glycyrrhizæ,
Cretæ pretaratæ,
Gum. Camphoræ, aa, ℈ij,
Misce.

This compound is almost exclusively employed by the disciples of Dr. Tully, and by many other physicians in Connecticut and Massachusetts, in all cases in which Dover's powder is commonly employed. It is supposed to be more palatable, and less apt to excite vomiting than the remedy for which it was substituted, while its efficacy is the same. The usual dose of this powder is ten grains, containing the sixth of a grain of sulphate of morphia.—*Virg. Med. and Surg. Jour.*

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CASE OF SUDDEN DEATH.

BY W. H. H. RICHARDSON, M. D., EAST MONTPELIER, VT.

J. W., farmer, 46 years of age; robust; weight more than 200 pounds, and of intemperate habits; first applied for medical advice, February 8.

His general health has been always good, except several attacks of acute rheumatism in the earlier part of his life, which disease he considers hereditary in his family.

Says he was attacked a few days since with pain in his limbs and in his knee, and ankle joints, with œdematous swelling of the lower extremities and scrotum.

Present condition. Conjunctivæ injected, tongue slightly coated, appetite capricious, bowels regular, nervous system somewhat excited as of one who has suffered from delirium tremens; impulse of the heart strong, striking its opax against the thorucic wall to the left of its normal position; respiration 24, pulse 90, urine tested both by heat and by $N+O^5$ and found to be very albuminous, having a specific gravity of 1020.

Treatment. Perfect quiet enjoined, with anodynes and mild tonics. For the nine succeeding days he appeared to be slowly convalescing; but on the 17th, without any previous unfavorable symptoms having been noticed, suddenly became comatose, and died in one hour. I should, perhaps, mention that the urine had continued albuminous during the whole of this period.

Autopsia, 24 hours after death.

External appearances, nearly normal.

Brain. Vessels of the dura-mater much injected. About one teaspoonful of serum in the arachnoid sac. The meshes of the pia mater filled with transparent serum, giving it the appearance of a jelly-like membrane. When the arachnoid was punctured, this serum leaked out and the jelly-like appearance disappeared. Three ounces of serum in the cranial cavity, arachnoid membrane somewhat opaline soperiorly and laterally, the larger vessels bordered by white lines, vascularity little more than natural. Brain of usual hardness, with no marked distinction between the cineritious and medullary portions; the latter, however, considerably injected; considerable serum in the ventricles; small bladders of serous fluid in the choroid plexus, giving it a beaded appearance.

Chest. Upon opening the chest the lungs do not contract.

Heart. The precordial space uncovered by lung, unusually large; being six inches transversely, and six inches perpendicular; of a conical form. Three ounces of bloody serum in the perecardium. The heart was very large, being 14 inches in circumference at its base before being emptied of blood; length from base to apex 5 inches; right ventricle one third larger than natural; average thickness of wall half an inch, valves healthy, right ventricle filled with a firm clot, taking the mould of the pulmonary valves. Left ventricle one third larger than natural; thickness of walls at middle, one inch, at apex half an inch, at base five eighths of an inch; valves healthy; making a simple hypertrophy, with moderate dilatation of cavities. Weight of the heart, 20 ounces (avoirdupois.) *Lungs* mottled with carbonaceous matter; right lung adherent at base and apex only. The upper and middle parts are in the first stage of pneumonia, which was most intense at the central part, while the surface was less congested. No tubercles discovered; one and one half pints of bloody serum in the pleural cavity.

The left lung was in a state of inflammation. The bronchial tubes somewhat injected. Kidneys healthy.

From the albuminous urine I had expected to find granular disease of the kidney, and that the sudden death was from poisoning by urea; but the result of the post mortem examination did not confirm such an opinion.

For the N. H. Journal of Medicine.

LIGATURE OF THE SUBCLAVIAN.

A. M. Wardwell, of Otisfield, Maine, by a fall from his cart received a severe wound from a pitchfork which he held in his hand. The tine entered obliquely near the left breast and passed into the axilla, puncturing an artery. In a few moments there was a diffused aneurism of enormous size, extending from the sternal portion of the clavicle to the axilla. Physicians were called, who, after a week, poulticed the tumor for the purpose, I suppose, of bringing on suppuration. On the 23d inst. I was called with others to see him, four weeks after the injury. He had grown very feeble, from long-continued suffering; was unable to sit up, or move himself in bed. Severe pain and numbness in the left arm, and hand from the upward pressure of the aneurism, which had elevated very considerably the shoulder and clavicle. We decided that there was no possible chance for his recovery in his present situation, but that death would soon terminate his sufferings. The operation of taking up the subclavian artery above the clavicle, was agreed upon as the only means by which the hemorrhage could be prevented and life prolonged. This, though a difficult operation under the most favorable circumstances, was rendered far more hazardous in this case, from the elevation of the shoulder and clavicle making the distance from the clavicle to the artery, which is usually an inch, an inch and a half, to two inches and a half.

Dr. Isaiah M. Blake, of Bridgton, performed the operation with a firm and skilful hand, and evinced a knowledge of his profession, though comparatively a young man, which would do honor to any surgeon.

Five days after the operation Mr. Wardwell was very comfortable and cheerful. There was a slight pulsation of the radial artery at the wrist, and a fair prospect of his immediate recovery. His age was 58 years.

Fryeburg, Oct. 3, 1854. RUEL BARROWS.

Lectures on Fevers. By William Stokes, M. D., *Regius Professor of Physic in the University of Dublin.*

Lecture IV.

It was my intention to have commenced to-day the examination of the more important secondary diseases of fever; but we must postpone this part of the subject, and take the opportunity of studying the general symptoms of fever as they are presented in their most aggravated and appalling form, in the case of the young man Hardcastle. This patient is a native of England, and has been but a short time in Dublin, and his case is full of instruction.

I have mentioned that this patient is a native of Ireland, because it is probable that this circumstance has acted in modifying the symptoms of his disease. Had this patient been attacked with fever in his native place, he probably would have shown the symptoms of what is called typhoid fever, and the case would have been a comparatively mild one. But, at all events, this much we may believe, that different countries present endemic, sporadic, and even epidemic fevers, with characters in some degree peculiar to themselves; and we are not yet able to explain why fever in one country differs so much from fever in another—why maculated typhus should be so common in Ireland, and so rare in England—nor why the fever in Paris should so constantly present a particular local lesion. Many causes, doubtless, act; and I suppose among others such as climate, diet, soil, and so on, that the race and temperament are to be reckoned. And I have suggested that if the various families of mankind have a physological stamp, they probably have also their pathological peculiarities. However this may be, it becomes a curious subject of inquiry to determine what are the modifications of the symptoms of the fever in Ireland or in any other country, when the patient is not a native of the country, and especially if he has not long been resident in it. The most extraordinary case I ever witnessed was that of a gentleman, a native of France, who, after a long exposure to contagion, contracted maculated typhus here. He was a man of a sanguineo-nervous temperament, and exhibited during his illness a succession of symptoms widely different from those which we commonly see in the spotted typhus of this country. He was profusely maculated, and the peculiarity of the case consisted in the irregular manifestations of various local symptoms, and the inconstancy of the general condition, especially with reference to excitement nor collapse. This gentleman happily recovered, after passing through a storm of disease, such as I and his other attendants, Dr. O'Ferral and Dr. Graves, had never seen before.

Hardcastle is a young man who has been well educated, and he is evidently above the rank of the ordinary hospital patient. His symptoms have been, from an early period of the disease, alarming in the highest degree. You will seldom see a worse case of adynamic fever. We may safely say that for the last fortnight, both by day and by night, there has been an uninterrupted struggle between medical art and the fell disease which is upon him. During that time he has been lying more like a decomposing corpse than a living man; but he has been kept from dying by the bold and constant exhibition of stimulants, by tonics, and by food.

Some of you may wonder why it is that we thus go on with the increasing exhibition of stimulants—the untiring efforts to support life, although for the last ten days at least we have been hourly expecting his death? And the answer is, that we believe his disease is one that may subside, sooner or later, under the law of periodic action. His recovery will then take place,—not in consequence of the action of any specific which has the power of curing fever, but from causes the nature of which is hidden from us. We are like the defenders of a post attacked by a powerful enemy, but yet expecting succor, and we seek to hold the place till that succor arrives.

There are two points in this case worthy of notice. One is, that the nervous system has been so little engaged. He has had occasionally a slight delirium, and latterly some agitation and slight subsultus tendinum; but though he generally appears sunk in stupor, it is not true coma, but rather the stupor of exhaustion, for when you rouse him his intelligence seems to be good. Is this escape of the brain to be looked on as favorable, or the contrary? According to an old and well-founded opinion, all anomalous circumstances in fever are to be feared. You know the aphorism, "*Pulsus vultus et urina, bona, et æger moritur.*" This contains an important truth; but, in typhus, the want of nervous symptoms is in general favorable; for of the symptoms referrible to one of the three cavities, doubtless those indicating nervous lesion are the most formidable.

The second point to which I wish to direct your attention is, that although this patient presents the symptoms of typhus so decidedly, he cannot be said to have any maculæ or petechiæ. In fact, his skin has been unaffected; there has been none of the so-called exanthematous eruption of typhus; and, even at this advanced period, the existence of petechiæ is so doubtful that I would not say that he has them. Yet, if ever a man had the *typhus gravior*, this man has it. His surface exhales the peculiar odour of typhus, strongly marked; he is prostrated to the last degree; he has been kept alive by the most powerful stimulation; he has a feeble heart and well-marked secondary affections of the intestinal and bronchial surfaces; his mouth is full of sordes; his tongue black, dry, and cracked; his breath fetid. The stethoscope indicates a general and severe bronchial affection, and there is a wasting diarrhœa.

I am not going to take up your time by a discussion as to the distinctive characters of typhus and typhoid fever, about which so much has been written of late. But it would be, I think, difficult even for the advocates of the distinction to declare in which class this case should be placed. In this instance, as in most others, the settlement of the question is of little value; for, whether the disease be typhus or typhoid fever, the treatment should be no other than that which we have so far carried out. I may say this much, however, that the presence or the absence of an early eruption having some similarity to an exanthem; or, again, the presence or absence of petechiæ, appears to be insufficient to justify our drawing a strong line of distinction between these diseases. As to the doctrine that the early eruption in typhus is a true exanthem, and that its absence in any given case points out that the disease is not typhus but typhoid fever, I would advise you to receive it with more than caution. Again, it is stated that the non-maculated fevers are often protracted and dangerous. So they are, but not so often as they are short and easily managed. And I have not seen that relief of organs in typhus which some describe as the rule, when the eruption appears. How, then, are we to look on the eruption? Certainly not as a distinctive mark between two different diseases. Gentleman, we know that typhus fever will run its course, and destroy life, without the production of any hitherto ascertained anatomical change. We know, further, that in many cases local alterations are formed; but that there is the greatest inconstancy in different epidemics, and in different patients during the same epidemic, in the seat, amount, in the time of appearance, and in the results of these local changes. The cutaneous affection is plainly one of this group of secondary affections; and its absence or presence can no more be said to distinguish the disease, than the absence or presence of any other of the secondary affections. I think we may admit that an early and florid eruption is often met with in cases in other respects well marked; and again, that such cases generally require and bear stimulation.

To return to the case of Hardcastle. We observe that there has been as yet no tendency, either to the critical or periodical retrocession of the secondary diseases, nor to the critical or periodical termination of the general affection. The 14th day passed by without any crisis or without any subsidence of the disease; the 18th day passed by; the 21st day has passed by; and he is now in the 24th day of this terrible disease, kept alive by the use of wine, administered every hour, and also by the occasional free use of hot brandy punch. He presents an appearance to-day to which I wish especially to direct your attention. You may remember that Saturday last was the 21st day, and it was then reported to me that the patient was getting a bed-sore. Upon examining him, we found, in the ordinary situation of bed-sores, a blush of redness and a slight degree of œdema; and beyond that there was nothing remarkable. There was this point, however, which I observed at the time, although it was not until to-day that I thought of its importance, namely, that there was already a solution of continuity of the skin. Now this is remarkable, and if such a case should occur to me again it would awaken my attention. In the ordinary case of bed-sores we seldom see a solution of continuity of the skin in an early period; we see lividity, blackness, if you will; but a solution of continuity of the skin before the ordinary appearances of mortification have occurred, is extremely rare.

In this patient, on Saturday, just at the very centre of the livid patch on the skin, there was a slight solution of continuity. During the evening the nurse observed that several dark-colored vesicles or pustules were making their appearance on various parts of his body. Mr. Parr saw these on Sunday, and he found that between the shoulders there was an eruption of livid tumors, which appeared to be something between vesicles and pustules; and to-day (Tuesday) such of you as saw the patient will not soon forget the extraordinary appearance of his back. I have been attending on fever in this Hospital since 1827, and I never saw anything of this kind before. Now, it is a very remarkable circumstance that this eruption of gangrenous vesicles or pustules should have occurred upon the twenty-first day; and this case, as far as it goes, appears to strengthen an opinion which I have long held, that we were in error in attributing what are termed bed-sores in fever simply to mechanical causes. The general idea is, you know, that they are simply the result of pressure long continued on a particular part of the body, from the neglect of turning the patient in bed, of pressure combined with the effects of position. Now, there can be no doubt that these are predisposing causes, but whether they are the sole and entire causes is another matter; and I am to a great degree convinced that the bed-sore in fever is often one of the group of secondary affections, analogous to the ulceration, or to the tumefaction and ulceration, of the glands of the intestine—analogous to the other secondary organic diseases of fever. And if analogous to them, it should be more or less observed to be under the law of periodicity; it should appear at a certain time, and it should disappear at a certain time, or, at least, exhibit a tendency to do so. We have observed this very curious fact. There are cases in which the system seems to be in a state that bed-sores will form from the slightest possible cause; that is to say, whenever there is any irritation or any pressure, no matter how slight, a bed-sore will form in any part of the body. Some years ago we had a patient in this hospital, who, after the 12th day, showed this tendency to bed-sores. She had bed-sores in the nates, and one on each shoulder. Then the tendency to the multiplication of these bed-sores increased, and every morning two or three new local diseases of this kind were discovered. Wherever there was the slightest possible pressure we found a gangrenous spot; in the fold of the arm, in the fold of the pectoral muscle, where the mamma leant upon the arm, where the head leant upon the hand in sleep, the mark of a black hand was stamped upon the face; where one leg lay on the other; in every possible position in which anything like pressure was made, or irritation excited, there were bed-sores; and this went on repeating itself day after day up to a certain day, until there were about thirty sloughs in different parts of the body; and from that day,—I might say from an hour of that day,—no more bed-sores formed, and the patient then had to go through the process of throwing off all those sloughs, the granulation of the cavities from below, and their cicatrization. She was kept lying on her face for upwards of a month, and finally recovered.

Now, what I want to draw your attention to in the case of Hardcastle is, that this extraordinary eruption of gangrenous patches on his back is not the nature of bed-sores, in the ordinary sense of the word. These patches are produced by pressure. We find them in great abundance in the hollow of the back, where pressure is relieved by the pelvis and by the shoulders. We find them in abundance in the interscapular region; but if we wanted additional proof it is this,—that we find them on the anterior portion of the thorax. They came out as vesicles. These vesicles became hard at the top, then black, and soon the mass dropped out; and this patient's back is now as if you took a sharp gouge and punched out circular portions of the flesh in vast number of spots. Now, it can be hardly doubted that this singular appearance is simply an example of a secondary disease affecting the surface; and it is very remarkable that it should have appeared on one of the critical days—upon the day when, in the ordinary course of fever, the disease should have subsided. And it strengthens greatly the opinion, that not only the general disease is under the law of periodicity, but that the secondary alterations are so too.

As a general rule, gentlemen, in prognosis, the occurrence of any vesicular eruption whatsoever in fever is bad. We have in fever several forms of vesicular eruptions. But, suppose a patient in the eighth or tenth day of fever, when he is otherwise going on well, you take his hand to feel his pulse, and you are surprised at seeing a vesicle upon his arm. Do not neglect that—do not overlook it. The mere circumstance of that solitary vesicle forming so silently without any pain, without any notice, points out that there is mischief before you—that the case is likely to go wrong. It is a very important prognostic. Here we have on this patient an eruption of vesicles running rapidly to deep gangrenous destruction of the part; for some of the cavities formed by them are singularly deep, though circumscribed. Now, suppose that in place of that disease attacking the skin, upon the fourteenth day, on the tenth day, or whatsoever day you please, in any case, a similar condition should attack the intestine. Suppose that the typhoid matter suddenly infilterated a gland in the intestine, and that that should fall as suddenly to gangrene, and that there was a solution of continuity; you will at once see the progress of the worst form of the typhoid secondary disease of the intestine. You may look on this man at this moment turned inside out, and that on the surface of his skin you are able to learn the history of the worst form of the typhoid ulceration of the intestine. The extraordinary condition of his surface no one will say is inflammation of his skin. Apply the same view, and will you say that the disease of the intestine is inflammation of the intestine? Certainly not. Whether this man is to live, gentlemen, or to die, I believe none of us can venture to say. Of course, the chances are enormously against him; but, in the treatment of fever, you are never to despair so long as the patient can swallow. So long as he is able to take nourishment, so long as he is able to swallow wine, no matter how dreadful or apparently hopeless the symptoms may be, you are not to desert him, but—to use the phrase of our glorious sailors—you are to fight the ship while she swims. In a disease under the mysterious law of periodicity, every hour of compelled life is a clear gain. And, over and over again, you will find that your efforts will be crowned with success. You will see a patient lying with his back icy cold; you will see him pulseless,—his lungs filled up with secretion,—his belly tympanitic, with dreadful diarrhœa,—the lower extremities gangrenous,—himself in a state of insensibility,—and yet, even under these circumstances, a recovery is possible. But that recovery can only be effected by the steadfast determination of the physician not to desert his post until the vital spark has actually fled; and, if you commit an error in holding on,—in hoping against hope,—at all events it is an error on the right side.

Lecture V.

With reference to the case of Hardcastle, with which we were occupied at our last lecture, we may hope that the symptoms have at last yielded. The great interest of this case consists in its having been an example of a fever in which the patient was scarcely maculated, yet in which the stimulating treatment had to be pursued with an activity as great or greater than that which we are called on to employ in the worst cases of spotted typhus.

On looking over the notes of the case I find that on his admission, which was on or about the seventh day, he had a few scattered maculæ on the abdomen, of a large size, and of a leaden gray color. He then had diarrhœa, abdominal tenderness, and ileo-cœcal gurgling; and the sounds of the heart, though weak, preserved their natural mutual relations as to force and duration. Doubtless the patient at this period might have been well described as laboring under typhoid and not typhus fever, according to the distinction now in vogue; but on the 14th, or the 21st, or the 24th day, he would be a bold man to declare that the case was not typhus of the worst description. He is now at the 28th or 30th day of his illnes, and we have every reason to believe that all will now go well. Since the eruption of gangrenous vesicles or pustules, which occurred on the 21st day, there have been no new appearances of this form of disease, there has been no new bed-sore, nor have the gangrenous patches spread, as might have been expected; two of them are in the form of sinuous cavities, but even these show signs of healing. These sores on the back were treated first, you will remember, by the simple and afterwards by the fermenting poultice; but as the latter gave considerable pain, the nurse returned to the simple poulticing, and now, under the advice of my colleague, Mr. Smyly, we have changed our plan, and are using stimulating dressings to the ulcerated surfaces. In the management of these sores, whether they be the ordinary bed-sores or examples of the gangrenous pustules, both of which appear to be of the nature of the genuine secondary affections of typhus under the law of periodicity, it sometimes happens that we have to deal with extensive sinuses. I have seen them sometimes of not less than seven inches in length. In most cases the best treatment for them will be stimulating injections, using as an apparatus the vulcanized India-rubber bottle, with a long and slender ivory pipe; and it is generally requisite at first to wash out the sinus with tepid water, and afterwards to inject some of the metallic solutions—diluted solutions of sulphate of copper, nitrate of silver or sulphate of zinc; and when the discharge is very fetid you may use the decoction of bark, or the solutions of chloride of lime or soda. An excellent dressing when the sore is open, is the Canada balsam combined with oil, or a mixture of equal parts of castor-oil and balsam of copaiva. You will derive advantage, also, from the employment of pressure by means of flat compresses of lint, and a roller, when it is possible to apply it, or in other cases you may employ strapping with adhesive plaster. When the sinus is in a depending position, and matter accumulates in its lower portions, it is sometimes necessary to make a counter opening; but this operation should rather be delayed until the system of the patient has improved. The case is then to be treated as an ordinary surgical case.

Now let me draw your attention to the diligence with which the administration of wine has been pursued in this case. We began the exhibition of wine on the 2d day of November, which was the eighth day of his disease; and for the next four days the quantity administered was six ounces daily. The wine used all through was port, of an excellent quality. From the 6th to the 11th he had twelve ounces daily, and from the 11th to the 18th his daily allowance was twenty-four ounces. During the next three days it was reduced to eighteen ounces, and from the 21st to the 26th to twelve ounces per diem. On the 26th and succeeding days he had ten ounces; on the 28th the quantity was reduced to eight; on the 4th of December he had but four ounces; and the wine was omitted altogether on the 5th. Besides all this, a tumbler of hot brandy punch, containing two ounces of the best brandy, was administered from time to time whenever the patient's state seemed to require it; and in this way he used about twenty-four ounces of brandy, and 438 ounces of wine, and, in addition, bark, musk, and ammonia were freely exhibited.

Some may suppose that this quantity of wine was excessive. Such is not my opinion, nor will it be yours when you come to treat the typhus of this country in a large hospital. I am sure we might have given him with safety much more, and I doubt if we could have done with less. And the result of the case confirms what I have said to you before, that in case of a fever, no matter how terrible the group of symptoms may be, you are not to despair, so long as the patient can swallow. Bear in mind, too, that all through, Hardcastle has been carefully fed with chicken broth, beef-tea, and jelly; and we have now passed that period when, under the law of periodicity, his terrible disease will subside.

This case brings to my recollection two remarkable instances in which an extremely bold use of stimulants was the means of saving life. Both were cases of most malignant typhus, and in both instances the patients were medical men. In the first we administered more than two dozen of wine, of which six bottles were champagne; and besides this, the patient had not less than six bottles of brandy. His fever did not pass the twenty-first day; it was, therefore, at least ten days shorter than that of Hardcastle's, so that the stimulants were not only in greater quantity, but exhibited within shorter intervals of time. The symptoms in this case were the most extreme adynamia, continued coma, persistent coldness of the breath, enormous vibices, and a general purplish black color of the skin. We could discover no local lesion: the recovery was perfect, and the gentleman has now remained for many years in excellent health. He was a man of very temperate habits. In the second case, on about the twelfth day of the fever, I was called to see the patient; he had got no stimulants. The nervous system was free, the surface was cold, and the pulse almost imperceptible; the integuments of the lower extremities, from the middle of the calf downwards, were black, and hung in loose wrinkles on the limbs. The patient swallowed about sixteen ounces of brandy in the course of a few hours; reaction was established, and the case did well. We expected extensive mortification in the legs, but within four-and-twenty hours from the commencement of the exhibition of stimulants we found that the circulation was fully reëstablished, the extensive blackness had disappeared, the limbs had recovered their fulness, and the subsequent loss of integument, which occurred only in the feet, was very trifling. In this case there was a petechial eruption, approaching to purpura; but although it is generally true that stimulants are more often called for in the maculated than in the non-maculated cases of fever in this country, yet you must bear in mind that, as in the case of Hardcastle, you will meet with a typhod fever, if you choose to call it so, in which the most energetic stimulants is required. I have given an example of this in my paper on the State of the Heart in Typhus Fever, in Vol. XV. of the *Dublin Medical Journal* (First Series.) The patient used 292 ounces of wine, 20 ounces of brandy, 7 bottles of porter, and had besides various medicinal stimuli and abundance of food. The principal symptoms were extraordinary prostration, coldness of the surface, and feebleness and irregularity of the heart's action; and it was not until the end of the eighth day of the exhibition of stimulants in great quantities that any favorable influence was produced in the circulation; and the case strongly illustrates the advantage of persisting in the use of stimulants, although for days together no amendment seems to follow their employment.

I have sometimes observed that students were under a misapprehension about the doctrines which we have long held in the hospital with respect to the condition of the heart as a guide for the use of wine. They have come to the erroneous opinion that we are only to give wine where we find the want of the first sound of the heart, and that we are not to give wine where the heart is acting well. This is a mistaken view of the matter. What we have established as to the state of the heart in connexion with the effect of stimulants, is simply this: We have ascertained that the efficacy of stimulants is often directly as the debility of the heart. It has been also ascertained that the power of bearing stimulants, their effects upon the nervous system, their good effects on the general condition, are directly as the weakness of the heart. We may lay down as a rule, that there are three conditions of the heart to be looked at by the practical man in the treatment of fever. In one we have an excited heart—a violently excited heart all through the case; and this heart may be excited and violent, although the symptoms be those of extreme adynamia, although the surface be cold, the breath cold, and the pulse so feeble that it cannot be discovered. Nay, the heart may act with great force for several days, and yet there be no pulse at the wrist. This is one case. In the next case, we find exactly an opposite condition, in which the systolic force of the heart is diminished. This is shown by loss of impulse of the heart, by diminution of the first sound, and in certain cases, by extinction of the first sound of the heart while the second remains. This is a case which calls for wine, and in which you should give it: it is a case in which, in the vast majority of instances, wine will agree with the patient. There is a third set of cases in which the heart does not seem to be implicated at all in the course of the disease; in which, notwithstanding the existence of the most extraordinary group of symptoms affecting various organs, the heart, in the middle of the storm, seems to be in a state of calm and quiet. If we compare these three sets of cases with a view to prognosis, we may arrange them in this way. The case of excited heart all through, with feeble pulse and with adynamia, is unquestionably the worst case. There is no worse symptom in fever than an excited heart. It is especially a bad symptom when, with that excitement, we find a feeble pulse. The next will be the case of the sinking of the heart; and the most favorable case is that in which, as I said before, the heart seems to escape disease. But you are not to suppose, that because you have an excited heart you are not to give wine, if the symptoms of the patient require it: and you are not to suppose that, because the heart is not affected at all, you are to withhold wine, if the general symptoms of the patient require it. You are not to found your exhibition of wine or stimulants upon any one thing; you are to take the general state of the patient into consideration. What we have done is to discover an intelligible practical rule which will guide you in the use of wine in certain, I think in many cases; but you are not to suppose that because this man has a clear first sound at his heart, therefore you are not to give wine. You are not to suppose that because the heart is safe you can do without wine. Now, in the care of Hardcastle, recollect that although his heart seemed to escape, or was at most only feeble through the course of the disease, what frightful adynamia existed; how for day after day the patient's face was Hippocratic, or almost so; how the general character of the disease was that of the most terrible putrescent fever; yet his heart escaped. And here is the result. We have given that man upwards of twenty bottles of wine and twenty-four ounces of brandy, and now, on the twenty-eighth or thirtieth day of the disease, we have the satisfaction of feeling that his case may be set down as among the triumphs of medicine. I wish also strongly to impress on you the great importance of the use of other forms of nourishment in this disease; for we must not only keep up the nervous energy of the system by wine, but we must support nature by food. There is no mistake more fatal in fever than the withholding of food. I was early taught the importance of the use of careful nourishment in fever by my friend and colleague, Dr. Graves. I remember once Dr. Graves, when speaking of the necessity of the use of nourishment in fever, made use of these words, "If you are at loss for an epitaph to be placed on my tomb, here is one for you,—"*He fed fevers.*'" In addition to the prejudices with which the inflammatory doctrine imbued so many minds with respect to the use of food in fever, there was a new set of arguments raised against it, in consequence of the experiments of an American physician. I allude to the case observed by Dr. Beaumont, and so often quoted since. In this remarkable case various medicinal substances and articles of food were introduced through an external fistula into the stomach, their effects being noted, as also the conditions of temperature, vascularity, etc. A set of results were subsequently published in connection with the action of the stomach upon food. One of the results stated to have been thus obtained was, that the existence of the state of fever altogether suspended the process of digestion. Here was a statement which had the appearance of being the result of strict observation. It influenced a number of young men; but did it influence those who had once been in charge of a fever hospital? Not at all; because those men knew very well that, no matter what Beaumont might say about the stomach not digesting when the patient had fever, in thousands of cases patients in fever digested remarkably well, required food, and derived benefit from it. In a large number of cases of typhus fever, the stomach has an excellent power of digestion; and I believe, if we were bold enough, we would find that many articles of food usually forbidden to fever patients might be given to them with safety. A curious incident was related to me, which shows that the stomach in fever is capable of digesting even a rather coarse article of food. A lady who had been recently married was attacked with extremely severe petechial fever; she was covered with dark colored maculæ, and the disease had run to about the twelfth or thirteenth day. She was attended by several eminent physicians. Her case was an extremely bad one, and her life was all but despaired of. She was violently delirious. Her husband had occasion to leave the house on some business. At the period of the dinner-hour of the family, the servants were cooking a rump of beef and cabbage, and the odor of it filled the house. In her delirium, she called for some of the beef and cabbage. She was then, you must understand, in severe fever, and covered with maculæ. Her sister, who was attending her, believing she was dying, thought it only right to indulge her, from the feeling that it was right to indulge a dying person. She proceeded to the kitchen, and as soon as the beef was boiled, cut a very large mess of beef and cabbage; and this was brought up smoking hot to the lady's bedside, when she devoured it with great avidity. Shortly afterwards her husband came in, and was told what had happened. He became terrified, and sent for physicians in every direction. Four or five assembled; time was pressing, and every one agreed that something should be done. At length the late Dr. Harvey, a practical physician of the very first class, arrived. He was laid hold of by the agonized husband, forced up stairs, and his opinion earnestly requested. At that time the stomach-pump was not in fashion, but every one agreed that something should be done, that an emetic should be given, or some extraordinary effort made to get this mess of beef out of the lady's stomach. When Dr. Harvey went to the bedside, he found the patient in a tranquil sleep. He turned round, and when anxiously appealed to what should be done, he said—"You had better wait till she wakens; let her sleep it out." She slept for four or five hours; awoke wonderfully better, and on the following day was out of danger. I do not give you this case to induce you to feed your patients with salt beef and cabbage in fever; but it is very important, as showing that in typhus fever, with masculæ, the stomach is capable not only of digesting such a coarse article of food as salt beef, but that even such food may have a good effect.—*Virginia Med. & Surg. Journal.*

EXTRACTS FROM THE REPORT OF THE PROCEEDINGS OF THE NEW-YOLR PATHOLOGICAL SOCIETY. [Selected and prepared by Committee of Publication.]

Specimens and Cases, by A. Clark, M. D., Prof. of Physiology and Pathology in the College of Physicians and Surgeons.

Heart Clots.—Prof. Clark presented a specimen of polypus of the heart, and remarked that he found so many of them that he could match all the polypi exhibited to the Society. This was not so white as others which he had exhibited, but it had the same kind of attachments. The man from whom it was taken was under observation but a few hours. He was very intemperate. Came into the hospital in the morning with pneumonia and capillary bronchitis, and died the same evening. The clot was found in the right side of the heart. One of the folds of the pulmonary valves was torn in two places. How this lesion occurred he did not know; it did not seem to be recent. The two openings through the valve could still be seen, one of which showed very well. An interesting point in regard to them was that this polypus had insinuated itself into those openings, as also one higher up, and completely filled them. This clot was firm and somewhat more bloody than usual; he exhibited it as presenting the ordinary firmness of those usually supposed to have formed before death, though it had evidently occurred after death.

Waxy Liver.—Prof. Clark then remarked, that at the last meeting of the Society he presented a specimen of what was sometimes called *waxy liver.* These specimens were rare, but he now had another to exhibit. The appearance was very much like that of the one formerly exhibited. This specimen, however, differed somewhat from the other, as a few of the cells contained a small amount of fatty matter, while the larger part of them are free from fat and seemed to be a new production. He supposed this ought to be called the "waxy liver," and yet there seemed to be some diversity of nomenclature. The "scrofula liver" would perhaps better bring it within the range of the description of such cases. In this instance, however, there did not appear to have been any scrofula. The person from whom it was taken had syphilis at the time of her death. The point of interest was whether she had syphilis and had long been treated with mercury, or whether she had scrofula. The specimen presented at the last meeting was a very good illustration of this point, for the man had scrofula, as seen from two large ulcers under his arms, and also had had syphilis, and had been treated actively with mercury. In both instances there was a considerable amount of abdominal dropsy. In the last it was extreme, and was supposed before death to depend upon cirrhosis, but on post mortem examination this condition presented itself.

In regard to the character of the deposit, he did not think that any writer had fallen upon its true nature. Dr. Bennett had probably come nearer to it than any other writer, and he seems disposed to conjecture that there was a change produced in the cells of the liver after the absorption of fat; that it was a latter stage of the fatty degeneration: that in truth the oily matter had been taken up and the fatty cells left. Dr. C. did not regard this as a fair explanation. It seemed to him that by the enlargement of this liver, producing the hardness observed in it, a new production of a peculiar nature resulted. He thought these cells were not deposited like ordinary cells in the tubes, but that they were diffused, obeying no particular rule. To enforce this statement he introduced a portion of the mesentery for the purpose of exhibiting the glands. These were swollen, many of them of the size of a bead, were easily turned out from their beds; they were not remarkably hard, having no appearance of any heterologous deposit like tubercles, but still they were enlarged and pale. He found exactly the same material in great abundance that was observed in the liver; the cells were not found in the tubes, but in the fibrous tissue. The stroma of the glands running between the tubes seemed to be infiltrated with these cells. In order to ascertain if possible the nature of this deposit, whether it was a peculiar form of fatty degeneration or some new undescribed form, or whether the reaction of chemical agents would be the same upon animal tissue, he treated sections of the part containing the cells with rectified sulphuric ether, in expectation, if it was fatty, that it would be dissolved. No change whatever was produced. He then employed boiling ether, but still no change was effected. They were next treated with strong acetic acid; this seemed to render the cells more transparent, but they remained entirely unchanged in form. This maceration was continued for an hour, and to be sure that the experiment was well performed, he placed a quantity between two plates of glass, but observed no change in their form, though the tissues about them were much more transparent, the fibres being then less distinctly visible than before. He then macerated them with boiling alcohol, which produced no change, though it reduced the sections to the consistence of spermaceti. Finally they were treated with nitric acid of various strength, and it was observed that when the acid was sufficiently strong to dissolve animal fibre, they did change, but when it was of less strength, they did not. This proved that they were animal in structure, and of a peculiar and undescribed form. In regard to their distribution, he said that they were so evidently distributed outside of the tubes and in the midst of the fibres in the glands, that the opinion which he had formed from the examination of the liver alone was probably a correct one.

Adherent Pericardium.—Prof. Clark exhibited a heart with the pericardial inflammation. The effusion of lymph was seen on both surfaces. There were two points of interest in the case; one, that it was associated with Bright's kidney, and meningitis, the last disease, being apparently the fatal one. The second point was that, while attempting to catch the friction sound, he observed that at the height of an inspiration he could hear the second friction sound, while in the other portions of the respiratory act he could not hear it at all. He then directed the patient to take a full inspiration and hold it while he listened, when the increased distinction was so marked that no one could fail to recognize it almost instantly. The second sound was clearly developed by the procedure, while it was scarcely recognized in ordinary respiration. It occurred to him that this might be accounted for by the fact that the air, when we hold it in our lungs, is placed under considerable pressure, particularly when the lungs are partly filled, and, as a consequence of that, there would be a closer apposition of the pericardial surfaces than under circumstances of free respiration. He had had two opportunities, since this case occurred, of verifying this observation. In one it was perfectly clear, and in the other entirely absent. One was connected with a considerable amount of serous effusion, so much as to make the somewhat pear-shaped tumor which is frequently observed. This man did not give the peculiar sound at all; it could not be perceived at any period of the disease that these particular sounds could be heard any more distinctly in one portion of the respiratory act than another. But in a child suffering from pericarditis, he noticed that when it took a full inspiration the friction sounds did not seem to be very much heightened, but when it took a half breath they were heightened.

Prof. Swett remarked that he had never seen an allusion to this method of obtaining the second friction sound, but he had very recently had a case in which these sounds came out clearly just at the end of an inspiration, but were not distinguishable at other times; he had not, however, made it the subject of reflection. *April 13th,* 1853.

Chagres Fever complicated with Pneumonia and Bright's Disease.—The patient, a man, was received into Bellevue Hospital, suffering from Chagres fever. At the time of his admission it was not known that there was any complication. He was in the hospital about two weeks. Two days before his death, it was observed that his respiration was difficult, and that he was becoming stupid. The house-physician discovered, on examination just before death, that he had pneumonia, and that his legs and hands were swollen. His urine was tested, and an appreciable quantity of albumen was found, so that he had Chagres fever, pneumonia, and what is called Bright's disease. On post mortem examination, two days after these facts were noticed, it was found that the left lung had undergone a very marked change, but the appearances were so little like ordinary pneumonia, that the house-physician concluded that his diagnosis was not correct. The lung was not crepitant in the least, though it was soft and flabby; about two-thirds of the lung was in the condition described by Cruveilhier, as carnification. It was evidently the result of pneumonia, but probably the exsanguinated state of the patient interfered with the full development of hepatization. There was a small amount of fluid in the pleural cavities, which was probably effused during the last hours of life. The liver had the bronze color that is so common, but it could be bent about and rolled into a mass. If it hung over the edge of the table, it would hug the side like a wet rag; it was a little under size, weighing three pounds and three ounces. The heart had undergone very much the same kind of softening as the liver, and was of a yellow hue; it bore a striking resemblance to hearts which have undergone fatty degeneration of the muscular tissue. The spleen run away from the hand like water; half of it was absolutely fluid, while the remainder was so soft, that it could be broken down into a pultaceous mass. The softening was much more marked than it is ever seen to be in typhus fever. Another remarkable point, was the condition of the kidneys; they were very small, of a dark hue, and together weighed seven ounces. The first kidney opened, gave exit, without pressure, to pultaceous matter resembling that which escapes from the spleen in bad cases of typhus; the color of the cut surface, was brown mingled with gray, and in the latter were observed the granulations of Bright's kidney. The other kidney was not at that time opened, but on pressing it, the fingers would nearly meet from the opposite surfaces; the capsule contained gas of some kind, which must have resulted from decomposition, as it could not be forced out. The autopsy was made 36 hours after death, and it could hardly be supposed that at this season of the year, would have commenced so early. The structure of this kidney was the same as the other, except that the degree of decomposition was somewhat less; the tubular portion was much less diseased than the cortical, and retained a good deal of its natural appearance. On examination with the microscope, the tubes were all found to be very granular, though there was no fat in them. It was not fatty degeneration then. The tubes were filled with granular matter, and there was not a single secreting cell in the whole of this pultaceous mass. Every cell had lost its nucleus, and the old cells seemed to have been changed or discharged by the bladder, and new cells, in the debilitated state of the system, could not be produced. The cells were not round, but elongated in both the tubular and cortical portions, and were filled with a new and distinct form of cell lining. There was no pus, or fibro-plastic cells in the tissue. *April* 27, 1853.

Apoplexy.—Thomas Connell, aged 48, native of Ireland, laborer, was admitted to Bellevue Hospital, on the 17th of Oct., 1853. As nearly as could be ascertained, the patient must have been drinking very freely for some weeks previously, but his health seemed to have been good up to the week before his admission to the Hospital. Neither he or his friends could give an intelligent account of the commencement of his sickness. On admission he was delirious, and walked with an unsteady gait, having much the appearance of a man intoxicated, but on examination he was found not to be in that state. Soon after being put to bed he became quiet, the pupils were contracted, pulse slow, small, and compressible, numbering 50 per minute. The skin was rather cool; he coughed a good deal, and a physical examination proved the existence of general bronchitis. The breathing soon became stertorous and he could not be roused. He was ordered half an ounce of brandy and a stimulating expectorant. Oct. 18th, the pulse had risen to 65, and was full and strong; the pupils were still contracted and insensible to light; tongue brown and dry. He ate moderately, and when asked how he felt, replied, "very well," but was still unable to give any account of himself. His bowels had not been moved since his admission. The brandy was discontinued, and an ounce of castor oil given; three grains of quinine were also ordered. He continued in this condition until the afternoon of the next day, when he again became apparently comatose, the pulse falling to 40 beats per minute, and the breathing becoming loud and stertorous. On the 20th, his condition was much the same, but during the night it was again found necessary to give him brandy, the pulse having become scarcely perceptible. This alteration of symptoms continued, unimproved by tonics and stimulants, and he sunk rapidly and died on the night of the 21st.

Autopsy, 13 *hours after death.*—The dura mater was found much darkened by congestion of its blood vessels; between that membrane and the arachnoid, over the summit of the cerebrum on each side, there were two and a half ounces of uncoagulated blood enclosed in a patch of false membrane. The upper surface of the brain was much flattened by compression; the lungs and heart were healthy; the kidneys were congested but otherwise natural; the other viscera healthy.

Dr. Clark considered the occurrence of coma with stertor so markedly intermittent, as to lead to its being attributed to the congestion of intermittent fever, and for which quinine was administered, as one interesting fact in the case; and the effusion of blood which did not coagulate, and which may have been effused a week before admission, another. The effusion seemed to have been into the cavity of the arachnoid, immediately underneath the dura mater, and to have formed for itself an investing membrane. On close examination of the dura mater, he could separate a layer which he believed to be the arachnoid; if this be the case, then the whole dura mater covering the effusion, is lined by the arachnoid, and it is impossible to account for the membrane which encloses the unaltered blood, lying unattached to the cerebral arachnoid, unless we consider it false membrane, and yet the tissues investing blood would scarcely appear to have been formed in 6 days. The limiting membrane was useful in preventing the farther extravasation of blood, and favoring subsequent absorption. He could scarcely suppose that the arachnoid could be separated into layers, one of which should embrace the cyst.

Hypertrophied Heart.—This specimen weighed 32 ounces; the chief enlargement was in the left ventricle, caused by disease of the aortic valves, two of which were so thickened and attached to the aorta as to admit of regurgitation. The patient was examined in the last stages of the disease, when diagnosis of the valvular lesion had become, as is usual, very difficult. Dr. C. remarked that he had been making some investigations to determine the mode of development in the case of hypertrophy of the heart. He had taken a healthy heart, weighing 9 ounces, and compared 50 of its fibres with 50 from this hypertrophied heart weighing 32 ounces. If there had been an increased development of fibre, those of the hypertrophied heart should measure under the microscope three times as much as those of the normal heart, whereas they did not differ very materially in size. The conclusion would be, therefore, that the growth of muscle demands the development of new fibre.

Encephaloid Disease in a Child.—The child was fifteen months old, and had been affected some four months with marked symptoms of tabes, but had suffered from general ill-health for a much longer period. The tumor became evident to the touch within the last three months. The mass occupied the whole of the abdominal cavity, and pressed up the liver, and with it the diapraghm, thus encroaching greatly upon the cavity of the thorax, and extended downward into the pelvic cavity, and was prolonged on the left side through the abdominal ring. On opening the abdomen two very large tumors were discovered, one fluctuating, and the other persistent. From the fluctuating mass flowed a wash-hand basin full of contents of a semi-solid consistence, similar to softened brain, and some of a more fluid glaring character. The mass appeared to be enclosed in the layers of the mesentery, though it involved other abdominal organs; the left kidney is affected, but the right is not; the liver is not involved, though there is a nodule near its free edge, which, from its color and other characters, is probably tubercular. Regarding only the many distinct tumors, enlarged mesenteric glands, and the miasmatic condition of the child, we might be led to consider this a very ordinary affection; but when we notice that the left kindey is involved, the immense size of the mass, its implicating many structures, and its rapid growth,—a different conclusion as to the primary origin of this disease may be arrived at. He was disposed to believe that it originated either in the mesentary or left kidney. There can be no doubt that the disease is the softest variety of encephaloid; the fluid was transparent and ropy, with rounded, granular cells, somewhat smaller than those in the mass. These cells have a diameter somewhat larger than blood corpuscles. The interesting points are: 1, the development of so large a tumor in so short a space of time; 2, the uniform character of the large mass; 3, the resemblance between the fluid and solid portions of the disease under the microscope.

Scirrhus (?) Pancreas.—Specimen presented by Dr. Clark, for Dr. McPhail, of Brooklyn, with the following history; this patient was a married woman, 37 years of age, and the mother of five children. She first came under my care some three months since, laboring under dropsy of the abdomen and lower extremeties. The kidneys were deficient in action, but the urine secreted was not albuminous; the bowels were constipated, consequent upon deranged hepatic functions. She had been living for more than a year in a very malarious district, some four miles from the city of Brooklyn, and all her children had there contracted intermittent fever. She presented the peculiar appearance of one resident in such an atmosphere, but had not suffered from febrile disorder. In the course of my attendance, I had to tap her upwards of six times, drawing off at the first operation about twenty-eight pints of a highly albuminous fluid. The medical treatment was directed to improve the condition of the liver and kidneys, without, however, much benefit. Only within the last ten days had she become jaundiced; but bilious vomiting was of frequent occurrence during the last month of her existence; still, she had long presented signs of gastric derangement, as nausea, eructations, red and glassy tongue, &c.

Autopsy.—Body emaciated, and deeply jaundiced; abdomen and lower limbs dropsical; peritoneum presented traces of inflammation; small intestines generally congested; liver much enlarged, indurated, and of a lighter color than usual; spleen somewhat enlarged. The pancreas was indurated, and thought to be scirrhus throughout, the thickening and hardening extending up along the common duct, and involving the tissues surrounding the gland, and the portal vessels. The kidneys were enlarged and congested; thoracic viscera healthy.

Dr. Clark remarked that, though the pancreas was enlarged and hardened, yet the disease was not malignant scirrhus. All the natural tissues of the pancreas can be found. It seemed rather a variety of hardening, and is worthy of exhibition as an additional illustration of the variety of true malignant disease in this situation. He did not remember to have seen a case where scirrhus began in the pancreas, though such cases are on record; he believed that the change in the specimen under consideration was often mistaken for malignant disease. The dropsy was probably the mechanical result of the constriction of the portal vessels by the enlargement of the pancreas. The kidneys are large, but have not undergone any of the changes of Bright's disease. The stomach shows some of the little prominences spoken of as polypi; it would not be difficult to suppose these growths were malignant, if the pancreas had undergone a similar change. They are made up of ducts, vessels, and fibrous tissue, and nothing else, so far as he had examined them. The ducts are similar to those noticed in the stomach, and all communicate with a single tube; this tube penetrates the whole depth of the fibrous mass, which would seem to be little more than a gland, accessory to the performance of the functions of the stomach. *Nov. 9th*, 1853.—*New-York Journal of Medicine.*

NEW-HAMPSHIRE JOURNAL OF MEDICINE.

CONCORD, DECEMBER, 1854.

End of the Volume;—Prospect ahead. With this number ends our fourth volume, and the first year of our editorial career, which we entered upon with many misgivings, but which has thus far given us no cause for regret. We have spent many days and nights in hard labor, in efforts to increase the value of this journal, and give it a permanency beyond any liability to accidental death. In this we think we have succeeded, and we hope our sacrifice of time and money has not been in vain. Our list has reached the paying point, and needs but promptness in payment of the annual subscription to place us above anxiety on account of its financial affairs. But we beg leave to remind our procrastinating friends that the difference between advance pay and pay at the end of the year, makes all the difference between loss and gain to us; to say nothing of receiving from a postmaster the gratifying news of "*dead*," "run away," or "gone to California," as a reason why a journal, on which is due, one, two, or three years' subscription, is not taken from his office.

There has been so large an advance in the price of paper and printing that we must forego many improvements which we had in contemplation; contenting ourself with providing a better cover and some minor improvements at present, and as soon as our list will warrant we will give more pages. We have made arrangements with some of our best physicians, both in this and other States, for aid as collaborators, and can assure our friends that our original department will be made to compare favorably with that of any journal on this continent.

Our arrangements are nearly completed, and our list of collaborators will be announced immediately.

But while we have secured the promise of a few friends, to render us special aid by way of communications, we hope none will be deterred from sending to us for publication any valuable matter which they may have it in their power to furnish. And we have not the least objection to receiving new subscribers at any time, and each of our readers has our free consent to call the attention of his neighbor to the "N. H. Journal of Medicine."

A NATIONAL MEDICAL SCHOOL. The University Medical School in New York City refused to admit the delegates appointed by the State Medical Society, on the ground that theirs was not a State but a *National* institution. This assumption of mock dignity is pretty conclusive evidence that "there is something rotten in Denmark," and that the charges of rascality, inefficiency, &c., of which we have heard, are too true. Another evidence is their neglecting to publish a catalogue of students and graduates, but we suppose they consider this also as beneath the dignity of THE *National School.*

PROSECUTION FOR MAL-PRACTICE. We have on several occasions called attention to the frequency of prosecutions of physicians for alleged mal-practice, and in a late number expressed our thanks that Prof. CROSBY had successfully opposed an attempt to rob him in this way. Since then three important trials of cases of this character have taken place; one in Massachusetts and two in this State.

Dr. BARTLETT, of Somerville, was prosecuted for mal-practice in treating the fractured clavicle of a miss of 8 years; but defended his rights with spirit, scorning to compromise; and although his defence must have cost him a large sum, he has maintained his character and done the profession a kindness, inasmuch as the plaintiff has failed to inflict even a nominal penalty on him.

The case of Dr. SARGENT, of Rochester, is familiar to many of our readers. Dr. S. was prosecuted for allowing anchylosis to take place in a case of compound dislocation of the ankle joint, with fracture of fibula and comminution of the tibia.

We extract from a report of the case by Dr. Pray, of Dover, published in the Boston Med. and Surg. Journal, some of the most important facts in the case:

"The case is Leighton *vs.* Dr. Sargeant. The plaintiff, while riding in an open wagon in the town of Strafford, was violently thrown out of his carriage, to some distance, and was severely injured. The right ankle-joint was dislocated, and a comminution of the tibia, with a fracture of the fibula, occurred. The injury is termed a compound dislocation of the ankle-joint, always a very grave injury, involving oftentimes the life of the injured. This took place on the 1st of September, 1850. As there was no physician then in Strafford, Drs. Grover and Sargent of Barnstead were applied to. They came dressed the ankle joint, and both had the supervision of the patient for somethree or four weeks. After this, the care of the patient devolved upon Dr. Sargent, for the space of one hundred and thirty-two days, in which time Dr. S. made sixty-two visits, living at a distance of some six miles. There can be no doubt that the injury was extremely severe, as all such injuries are. There was, of course, great constitutional derangement and a large tax upon the vital system, requiring all the power of nature to bear it up against the almost fatal consequences arising from compound dislocations of this character. Such, indeed, was the fact, as appears from the evidence in the case. The patient had feverish excitement, attended with cough, and had to resort to stimulation to withstand the prostrating effects of disease.

"The ankle joint was a long time in healing. For more than two years at times some portions of the joint would inflame and suppurate, and spiculæ, of bone issue from these ulcerations. Within a year the ankle had become healed, but stiff. The heel of the foot is raised some three inches, and the toes consequently drop; so that the plaintiff can walk with the aid of a cane. There has been a visible improvement in the external appearance of the foot. Absorption has taken place, muscular action improved, and more motion in the joint observed.

"For the prosecution only two physicians were summoned, viz.: Drs. Perry, of Exeter, and Hill, of Dover. From the evidence of Dr. Perry we shall make a few extracts. He states, that 'he believes he has had all kinds of dislocations of the ankle-joint (of which there are four,) and that he has been successful in the treatment of all of them; that the natural position of the foot at rest is at right angles with the leg; that passive motion should be made in dislocations of the ankle-joint as early as the third week, to prevent the joint becoming stiff; that there was no difficulty in fixing the foot in any position desired, and maintaining it there if it could have been fastened to the foot-pieces of one of the boxes; that there was anchylosis of the joint, but he could not tell whether bony or ligamentous anchylosis."

"The injury," he said, "was a very severe one, and the breaking into the joint (as in the case of the plaintiff) makes the bad about it." He knew of no reason why the foot could not be kept at right angles, and he never saw an instance where it could not be maintained in that position. "Most of the cases where the fracture is in the ankle-joint, are of doubtful cure. The wound in this case was healed up perfectly well—the only trouble was in not keeping the foot in the right position."

The defendant, in the maintenance of his case, proved that the right position of the foot was below a right angle, and the toes should drop about 1 inch, if complete anchylosis should obtain, with free mòtion in the knee-joint; that the defendant did make efferts to elevate the foot to nearly right angles, and when he left the treatment of the patient, the toes were less pointed than at the present time; that continued ulceration and suppuration about the joint would tend, from the powerful action of the gastrocnemii muscles, to contract the heel and consequently point the toes.

About twenty witnesses testified that they saw a book three fourths of an inch thick frequently behind the foot board, which would bring the foot nearly at right angles with the leg. The plaintiff, however, endeavored to prove that when the book was behind the foot-board, it must have been as late as November, 1850, instead of September or October, as the defence allege.

The defendant on the first trial had Drs. Samuel Parkman and H. J. Bigelow, of Boston, as witnesses: and on the last, Dr. Bigelow alone; with Drs. Martin, Low, Thomson, and Bickford, of Dover; Dr. Farrington, jr., of Rochester; and Dr. Knight, of Franklin. We propose to give pretty fully the testimony of Dr. Bigelow, leaving out that which is not important to the case.

His testimony is as follows:—"Compound dislocations are very severe injuries, so that amputation is necessary in some instances; in others, surgeons attempt to save the limb, which often results in death. The best treatment cannot make a good limb. It often becomes stiff, and there is great difficulty in keeping the foot at right angles, when there is great pain and inflammation. If the knee is limber, the proper position of the foot in anchylosis is below a right angle. The toes should drop a little.

"In cases such as supposed (viz., when there is a compound dislocation of the ankle-joint, together with the comminution of the tibia, &c.,) a result, such as the plaintiff's foot now shows, might most certainly occur under the best surgical treatment. I have had cases under my own care, where the result was as bad as this—from such injuries as I suppose this to have been, a compound fracture and dislocation, or even from a simple dislocation or fracture above the ankle-joint. Not unfrequently as bad a result as this attends the best treatment. I had a case of simple fracture of the leg last winter, where there was a great lateral distortion, as bad as the plaintiff's. I never had a case where the toes pointed exactly like these. I have seen cases as bad or worse.

"I think there is a little motion in the ankle-joint of the plaintiff. There is stiffness there, but it does not indicate bony anchylosis. I have doubts about there being anchylosis there. The foot, unrestrained, while inflammation and ulceration were at work around the joint, would be likely to get worse. The weight of the foot and the large muscles of the leg would draw up the heel.

"I have had two cases like the plaintiff's, during the last winter, in the Massachusetts Hospital. In the first one the tibia was broken, the malleolus fractured into the joint, and the integuments ruptured, so as to make it a compound dislocation. In this case the ankle was pretty stiff when the patient left the Hospital. The other was an Irish woman. The internal malleolus was broken off. I cannot tell about the result of the case, whether stiff or not. In each of these cases the foot was put into the position I always attempt to get it, viz., as near a right angle as possible, if the pain and inflammation will permit.

"The proper treatment of a compound dislocation of the ankle-joint is, to examine the foot with reference to the injury; to see if any pieces of bone are loose, and try and extricate them; then place the foot in a proper position, and put it into a box or splint. Keep it so until pain or suppuration occur, then change it as circumstances require. Worry along with it. Do the best you can. Keep it still, if possible, provided it is right as to position. One tendency of the foot is to fall down. Keep it up, if you can, but sometimes the pain will be so great that you will have to let it down. After all one can do, the surgeon is glad to get off with any foot that will do to walk on. If you put the foot in the best position to-day, to-morrow it will get out of its proper position. You cannot fasten the foot, so that the patient will not draw the heel back from the foot-board, to ease the pain. If you place ten limbs in a common fracture-box, by the third day not one of them would be in place, because the bandages will slip and stretch.

"I could not denominate it improper treatment to fasten a foot to the foot-board of the first box (when it falls some three inches from a right angle,) because the position is so comparatively a small and minor point. The stiff joint is something of three months hence. I should put the foot up; but if the inflammation were great, I should expect it to get out of its position in spite of me. It would not be proper treatment to place the foot at the angle of the first box for eight or ten weeks without making an attempt to elevate it. The position is a small matter in any case of compound dislocation of the ankle-joint, because the great question is to save the foot at all—to get such a joint as can bear the weight of a person in walking—to make the ankle sound.

"The efforts to save the joint are mostly those of nature. A surgeon may do much injury by interference. It is perfectly uncertain at what time passive motion may be used—not until the wound is healed up and the parts all sound. Joints are almost all in a state of anchylosis when they come out of the fracture-box, and all passive motion before would be injurious, especially when inflammation exists. Perhaps six months would be required in some instances, before motion could be resorted to.

"If a cough afflicts the patient, and there is constitutional irritability and pain, it would be impossible to elevate the foot. It cannot be done."

The testimony of the other surgeons in this trial coincided with that of Dr. Bigelow in almost every particular, and it would be useless to publish it.

Judge Minot, the presiding justice, gave the law in this case as follows :

1st. The medical man engages that he possesses a reasonable degree of skill, such as is ordinarily possessed by his profession generally.

2d. He engages to exercise that skill, with reasonable care and diligence.

3. He engages to exercise his best judgment, but is not responsible for a mistake of judgment. Beyond this, the defendant is not responsible. The patient himself must be responsible for all else. If he desires the highest degree of skill and care, he must secure it himself.

5. It is a rule of law that a medical practitioner never insures the result.

We have said before, that this case has been twice tried. The first time Dr. Sargent was fined $1500 and costs; the second, a smaller sum, about $525 and the cost of both trials, giving merely nominal damages to the plaintiff.

Among the legal gentlemen at the Strafford bar, it was generally thought, before the jury retired to the jury-room, that the defendant would not be fined. We think that there are very few medical men, who, on hearing the evidence upon both sides, would say upon their oaths that this was a case of mal-practice. Prejudice against medical men, and sympathy with the unfortunate, often do much to determine men to a course of action altogether wrong in fact and principle.

The case was set aside on the former trial by the Supreme Court, and is again transferred to that tribunal, under exceptions in some respects entirely new."

We have long since ceased to be surprised at any outrage upon right and justice; for the so called *progressive*, *philanthropic*, and *reformatory* spirit of the age is sure to find vent in villainously transgressing the rights of individuals; and whenever the medical profession is concerned, there is no so popular cry as, "*crucify him.*" But if we were not past the possibility of surprise, we should be so, that a jury, after such evidence as is here adduced, and after such a charge as that of Judge MINOT, should gravely bring in a verdict of damages.

We have never known a clearer or more intelligent exposition of the liability of medical men than the charge of Judge M.; but how, if a physician "is not responsible for a mistake of judgment," and "it is a rule of law that a medical practitioner never insures the result," any jury of common sense can assess damages in this case, is among the incomprehensible events of life.

If this case is not set aside by the Superior Court, we shall have less confidence in New-Hampshire laws than heretofore.

We have but a word to say of those surgeons who go into court and talk large of their success in treating "just such cases." While we will not accuse any of willfully misrepresenting their success, we will say that it is our honest opinion that an opportunity to appear as defendant in one such case, (which most of us escape more from extra professional influences than from our boasted success in practice,) would do more to change our temper towards our less favored brethren, than years of success and prosperity.

The third case is that of Rufus Pike, of Hebron, *vs.* S. H. Melcher, M. D. We copy the following account of the case from the Belknap Gazette:

"It was a suit brought some two years since for malpractice, and damages laid in the sum of *three thousand dollars.* The parties were Rufus Pike, of Hebron, *vs.* Dr. Samuel H. Melcher, of Groton. It was afterward referred to a board of referees, consisting of William P. Weeks, of Canaan, Judges Churchill, of Lyme, and Fowler, of Bristol. Able counsel was employed on both sides; for plaintiff, Josiah Quincy and A. F. Pike, Esq's, and for defendant, James Bell and J. E. Sargent, Esq's. The facts in the case, as proved on trial, are these: Mr. Pike was thrown from his sleigh in the spring of 1852, severely injuring his shoulder. Dr. Melcher was sent for, and found him suffering great pain in the region of the shoulder joint, and decided it to be a fracture of the socket, with a partial dislocation, and treated it as such. For five or six weeks the patient was doing well and was having the use of his arm; but, from either too much use, or carelessness, the fractured parts, not being sufficiently firm, gave way. Sometime after this he called on Dr's Long and Burns, of Plymouth, and Eaton, of Bristol, who examined it and pronounced it a *case of dislocation in the axilla*, or armpit, *which had never been put in place;* thereupon Mr. Pike commenced the suit. The testimony of Dr's Long, Burns and Eaton, on the trial, was to that effect, although they acknowledged *that they did not examine the case very minutely*, and had *never known* or *seen* a case of *fracture* of the *glenoid cavity*, but shall persist in their former opinion.

"The defendant met this charge by the testimony of Dr's Henry G. Clark, of Boston, Smalley, of Lyme, and Kelley, of Franklin, who had, previous to testifying, requested the privilege of making an examination of the injury. Dr. Clark then took the stand, and stated the injury to be a fracture of the glenoid cavity or socket, with a displacement of the "*Humerus*," and *not a dislocation*, as it *was not in the axilla;* fully sustaining the defendant in his opinions of the injury and treatment of it at the time of the accident. His testimony was so clear and convincing, which was also confirmed by Dr's Smalley and Kelley, that it was a complete refutation of the testimony of the plaintiff's witness, and effectually demolished their whole foundation; whereupon the plaintiff proposed at once *to abandon the suit.*"

We pity those doctors who "*did not* examine the case very minutely," but yet expressed an opinion which has caused a young and meritorious surgeon (who *did* examine minutely, and treated correctly,) much trouble.

But Dr. Melcher will be amply repaid for all the trouble, expense and vexation to which he has been subjected, in the increased confidence of the public, who, although slow to acknowledge modest merit, cannot fail to appreciate the superior skill of Dr. M. over his competitors.

MEDICAL EXAMINATION AT DARTMOUTH COLLEGE. We have received at the last moment, a short account of the late examination for degrees at Hanover.

There was a decided increase in the number of students in attendance on this course of lectures, which, at the present time, when there is a general falling off in the classes of almost all other schools, is a very gratifying fact.

The Medical Faculty at this school is now one of the strongest in the country, and we feel that while many of the country schools are dying out, this will not only hold its own, but have larger classes than heretofore.

The following gentlemen received the degree of M. D.: GATES B. BULLARD, *Irasburg, Vt.;* ISAAC S. FRENCH, *Loudon Ridge, N. H.;* TRUE M. GOULD, *Newton, N. H.;* JOHN H. GROUARD, *Great Falls, N. H.;* WM. H. HURD, *Lempster, N. H.;* STEPHEN KITTREDGE, *Milo, Me.;* WM. J. SAWIN, *Northfield, Vt.;* GEO. W. SCOTT, *Greensboro', Vt.*

One of the delegates from the State Medical Society says of these graduates: "They manifested at their examination the most convincing evidence of thorough and systematic instruction in the various departments of medical science."

The following we have taken the liberty to copy from a private letter from one of the faculty: "A very good class has been in attendance on the lectures; they have almost, without exception, been studious, attentive and gentlemanly. It is pleasant to notice, year after year, the improved character of the young men who are entering the medical profession. The number of college graduates is much increased; and those who have not enjoyed these advantages are found to have minds much matured by the discipline and training acquired as successful teachers. They go to the lectures to learn; and their studious habits and persevering labor brings to the school a public opinion alike delightful to the teachers and profitable to the hearers. The last class has been larger than for some years, though the number of graduates is small.

"It must be said, in justice to their receiving their degrees, that they have very satisfactorily passed the ordeal of examination, and certainly bid fair to make useful and reliable men in the profession."

FRUITS AND FARINACEA: THE PROPER FOOD OF MAN. Messrs. FOWLERS & WELLS, *No.* 308, *Broadway, N. Y.*, have issued a work of 314 pp., bearing the above title, written by one John Smith, and edited by R. T. Trall, M. D., an employee of the Messrs. Fowlers & Wells.

We find it an admirable digest of nearly all which has been written on the subject of a vegetable diet, and as such can cheerfully recommend it to those who are in search of that sort of literature; adding, that it is our opinion that all this talk about eschewing meat as an article of diet, by healthy persons, is entirely gratuitous and unfounded, upon any true basis. This opinion is the result of much careful attention to the subject; and we shall continue to order our convalescent patients "beef-steaks and brandy," till we are convinced of our error. We don't consider the book at all improved by Dr. Trall's labors, whose object seems to be to promote the sale of other publications of "the same sort." Thus the last of Dr. Trall's thirty-three notes is as follows: "[Note 33. To those who desire formularies for cooking *physiologically* on the vegetarian system, I would recommend the Hydropathic Cook-Book, published by Fowlers & Wells. T.]" He has illustrated it by pictures of all sorts, including sixteen figures of animals; several of different races of men; skulls and stomachs of men and animals.

TRANSACTIONS OF THE NATIONAL MEDICAL ASSOCIATION. We have received the seventh volume of the transactions, and although less brilliantly illustrated with what our witty brother of the "scalpel" calls "pomological specimens" than the last, we are inclined to regard it as not a whit less valuable; and we presume some of our brethren who have not a taste for brilliant lithography will give it the preference.

It is a volume of 688 pages, handsomely bound in cloth, and beautifully printed, by Baker, Godwin & Co., New-York. It contains the "Minutes of the Seventh Annual Meeting of the American Medical Association;" Address of USHUR PARSONS, M. D., Vice-President; Report of the Committee on Medical Education, by J. S. CABELL, M. D.; Report of Committee on the Epidemics of Kentucky and Tennessee, by Drs. SUTTON, HASKINS, LIPSCOND, and RAMSEY; an Essay on Erysipelas, by R. S. HOLMES, M. D.; Dr. PORCHER'S report "on the Medicinal and Foxicological Properties of the Cryptogamic Plants of the United States," which was made to the association two years since, but its publication deferred till now, that the author might make alterations or additions, and revise its publication. Report on the Epidemics of Ohio, Indiana, and Michigan, by GEO. MENDENHALL, M. D.; Report on the Epidemics of Louisiana, Mississippi, Arkansas, and Texas, by E. D. FENNER, M. D. The Prize Essay of DAVID BRAINERD, M. D., on "A new Method of treating Ununited Fractures and certain Deformities of the Osseous System." An account of the railroad disaster at Norwalk, Conn., with biographical sketches of those members of the Association who lost their lives on that occasion. Dr. LINTON'S remarks on the identity of bilious and yellow fevers. Repor tsof officers, list of members, and a copious index.

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